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ABSTRACT

Statistics about postgraduate training requirements in the main medical specialties in 26 European countries belonging to the World Health Organization are presented. It is noted that conventions vary widely from country to country concerning the designation of main specialties and subspecialties. These variations are apparent from the lengths of time given for training in some subjects. For each country, information is presented on undergraduate training, internships, specialist training, and assessment. For each specialty, information is provided on the number of years required for training, the inclusion of an internship, and type of examination. The tables enable comparison of specialties within and among countries. A brief narrative introduction reports the following trends: increasing specialization and subspecialization, a comprehensive review of the system of specialist training in seven countries, and formal postgraduate training in general practice/family medicine/general medicine in 18 countries. One reason for these trends and changes is the graduate shift in emphasis from high cost, high technology medicine toward primary care and prevention. Additional reasons are the need for cost containment and the desire to achieve international comparability of standards. (SW)

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Copenhagen

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EURO Reports and Studies 77

Graduate medical education in the European Region

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INTRODUCTION

A capacity study was carried out in the European Region between 1971 and 1973 to investigate the relationship between postgraduate medical education and health manpower planning.[a] Some of the information collected at that time was brought up to date and revised in 1976 and 1977,[b] and the following tables are a further revision of the information, kindly supplied by Member States in the WHO European Region, about postgraduate training requirements in the principal medical specialties. As far as possible this information is accurate, although its assembly has taken an appreciable length of time and it should be remembered that changes are constantly taking place.

It is hoped that the information will be useful, but it is necessarily presented in a brief form, and is confined to a limited number of specialties. Much additional information has been supplied by some countries and is available on request from the WHO Regional Office for Europe.

In some countries there is more than one level of specialization, and this naturally leads to differing requirements in terms of length and scope of training. In assessing the comparability of the systems in various countries this should be borne in mind, particularly in the case of Czechoslovakia and Poland. It should also be noted that information for the USSR has been supplied in terms of the number of hours of instruction required, rather than the years of training.

Conventions vary widely from country to country concerning the designation of main specialties and subspecialties. This has not always been precisely indicated in the information supplied, but it will be apparent from the lengths of time given for training in some subjects that these are, in fact, additional training requirements over and above the training required for a main specialty. Although certain specialties have been

[a] Document EURO 6301(1).

[b] Document CP/HMD 003(1).

grouped under internal medicine, pathology and surgery in Table 2, this layout does not always signify that the subjects concerned are subspecialties. Attention should be paid to the lengths of training shown, and the relevant footnotes.

Changes and trends since the first follow-up report

The number of countries reporting major changes was larger than at the time of the first follow-up carried out in 1976 and 1977, although the exact number of countries concerned is probably not important because of the wide variation in what may be interpreted as a "major" change. Also, it should be noted that the collection of the questionnaire returns and their analysis has taken almost two years, during which further changes have doubtless been taking place.

Some general comments are appropriate, and it should be emphasized that the information obtained from this inquiry is of a general nature only. Respondents were not asked to give exact details of all changes that have occurred and neither did the questionnaire make provision for this. The amount of information obtained was therefore variable, and further study would be required in order to comment authoritatively in point of detail.

New specialties

The trend towards increasing specialization and subspecialization continued, with at least eight countries indicating significant numbers of new specialties. Despite attempts at rationalization and the grouping of specialties under broad headings, the trend towards a finer breakdown of medical skills, particularly in the hospital field, is probably inevitable, but it requires much thought for the future.

Several countries commented particularly on the distinction between main specialties and subspecialties. There may be a fairly general move towards this kind of distinction although, as noted in relation to the tables, information on this point is by no means complete for all countries. The Federal Republic of Germany, Norway and Turkey commented specially on subspecialties, the Federal Republic of Germany and Turkey noting that accreditation in a subspecialty was now only possible after first completing a satisfactory period of training in the main specialty.

Review of specialty training

A more or less comprehensive review of the system of specialist training was evident in the replies from seven countries.

Primary medical care

Eighteen countries indicated that formal postgraduate training was available in general practice/family medicine/general medicine. In addition, France indicated that arrangements for this were in progress and it was clear from the replies from Portugal and Turkey that schemes were to be introduced. In the United Kingdom, postgraduate training for general practice became compulsory in 1981.

Examinations

There continued to be very considerable variation between countries with regard to the use of postgraduate examinations as a form of assessment in training, and as a part of the certification or accreditation mechanism. The introduction of a form of examination during training was noted by France and the Federal Republic of Germany, and in Iceland the presentation of an essay and original research are now required.

Internship

Two countries, Bulgaria and Spain, noted that the internship was set aside or discontinued and this may be assumed to be linked with changes in the undergraduate curriculum and/or postgraduate training period.

Standardization

Two countries, Italy and the Netherlands, commented particularly on changes in postgraduate education related to European Community requirements. Developments were also taking place in Italy to achieve a uniformity of criteria for postgraduate training between different universities.

Reasons for change

In very broad terms, certain underlying reasons can be discerned for the trends and changes noted above.

First, there is a gradual shift in emphasis from high cost, high technology medicine towards primary care and prevention. The European Region contains a wide spectrum of health needs and health systems. Inevitably, some countries still need to develop more sophisticated hospital services with a wider range of specialization within them, while at the same time, deficiencies in primary care and prevention remain all too obvious. In more highly developed countries these deficiencies may be less obvious, but are coming to receive more consideration as the relative

benefits of tertiary care are critically considered. This trend is in accordance with the spirit of Alma-Ata and the strategic aim of WHO policy. Coupled with this is the need for cost containment which becomes a matter of increasing concern to all nations, however affluent, as it becomes increasingly evident that the demand for health care is unlimited, while its potential cost rises inordinately. Graduate medical education is itself expensive, so that a need is felt by many countries to examine carefully the rationale for graduate training and whether its "completion" is not better achieved through continuing education. This, in turn, leads to a most welcome trend towards the viewing of medical education as a continuum, with as much coordination as possible between the various stages. Reappraisal of the internship, and, in some cases, its integration into the undergraduate curriculum or into the graduate training period, is an example of this.

Finally, an important incentive for change in graduate medical education is the desire to achieve some international comparability of standards. At present, this is evident in parts of the European Region through the formulation of European Community directives, but in a more general sense it is widely recognized that medical and specialist skills should as far as possible be international commodities. As medical science develops, graduate training must necessarily become more complex and more highly organized; this development always carries with it the risk of inflexibility which must be guarded against. Graduate training must continue to provide opportunities for doctors not only to change their career choice from one specialty to another, but also to move for legitimate reasons from one country to another, while retaining the maximum credit for the training they have received.

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TABLE I

BASIC INFORMATION
ON GRADUATE MEDICAL EDUCATION

Basic information	ALG	AUT	BEL	BUL	CZE	DEN	FIN	FRA	DDR	DEU	GRE	HUN	ICE	IRE
Undergraduate training														
Length of undergraduate training (in years)	6	6	7	6	6	6	6	7	6	6	6	6	6	6
Does this include internship?	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No	—	No	No
Internship														
Length of internship (in months)	12	4	12	12	12	18	6	—	12	11	—	—	12	12
Specialist training														
Does the minimum length of time required to achieve specialist status in a given specialty vary in different centres or areas of the country?	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Is formal specialist training available for general/family practice (general medicine)?	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes
Assessment														
Does assessment of specialists include														
national examinations?	Yes	No	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No	No	No
local/regional examinations?	Yes	No	No	Yes	No	No	No	Yes	Yes	Yes	—	No	No	No

Basic information	ITA	LUX	MAT	NET	NOR	POL	POR[a]	SPA	SWE	SWI	TUR[b]	SSR	UNK	YUG
Undergraduate training														
Length of undergraduate training (in years)	6	6	5	6	6-6½	6	6	6	5½	6	6	6	5	5
Does this include internship?	No	Yes	No	Yes	No	No	No	No	No	Yes	Yes	No	No	No
Internship														
Length of internship (in months)	6	1	24	12	18	12	4	[c]	21	12	11	12	12	12
Specialist training														
Does the minimum length of time required to achieve specialist status in a given specialty vary in different centres or areas of the country?	No	No	—	No	No	Yes	No	No	No	No	No	Yes	No	Yes
Is formal specialist training available for general/family practice (general medicine)?	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Assessment														
Does assessment of specialists include														
national examinations?	No	No	n.a.	No	No	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes
local/regional examinations?	Yes	No	n.a.	No	No	No	No	—	No	Yes	Yes	Yes	No	—

[a] Information based on reply from the Ministry of Social Affairs

[b] Information based on reply from Ankara. Other replies were received from Hacettepe, Cerrahpaşa-Istanbul, Çukurova-Adana, Eskişehir and Bursa

[c] Discontinued

Basic information	ALG	AUT	BEL	BUL	CZE	DEN	FIN	FRA	DDR	DEU	GRE	HUN	ICE	IRE
Control														
Are the requirements for training in the various specialties periodically reviewed?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
If so, at what intervals of time? (years)	Variable	Continually	Ad hoc	5	8–10	1	Approx 10	2	Approx 5	—	Ad hoc	3	10–15	Varies with spec
Are training facilities (i.e. hospitals or other institutions) subject to recognition?	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
If so, how frequently is this recognition reviewed? (years)	Variable	As reqd	5	5	—	1	Approx 10	1	As reqd	—	As reqd	5	Continually	Approx 4
Amended list of specialties supplied	Yes	Yes	Yes	Yes	No[a]	No	Yes	No	Yes	Yes	No	Yes	Yes	No
Changes in specialist training														
Have major changes occurred in specialist training in the last 3 years?	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	—	No	No[b]	No
If so, are details supplied?	—	—	—	Yes[c]	—	[d]	Yes[e]		Yes	Yes	—	—	—	—
Date when information was last revised?	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980	1980

[a] General medicine (i.e. family medicine or general practice) recognized as a specialty in 1978

[b] Specialist status depends on publication and university approval of original work

[c] *Internatura* temporarily discontinued

[d] Revision of specialist rules by Danish Specialist Board in 1980

[e] Considerable number of new subspecialties introduced

Basic information	ITA	LUX	MAT	NET	NOR	POL	POR[a]	SPA	SWE	SWI	TUR[b]	SSR	UNK	YUG
Control														
Are the requirements for training in the various specialties periodically reviewed?	No	Yes	n.a	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
If so, at what intervals of time? (years)	—	—	n.a		Ad hoc	5	3	As reqd	[c]	—	1	3-5	Approx 5	—
Are training facilities (i.e. hospitals or other institutions) subject to recognition?	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
If so, how frequently is this recognition reviewed? (years)	—	—	As reqd	5	2-3	3	4	As reqd	[c]	—	1	3-5	3-5	—
Amended list of specialties supplied		—	n.a	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No
Changes in specialist training														
Have major changes occurred in specialist training in the last 3 years?		—	n.a	Yes	No	No	No	Yes	No	No		No	Yes	No
If so, are details supplied?		—	—	Yes[d]	—	—		Yes	—	—		No	Yes[e]	—
Date when information was last revised?	1980	1980	1981	1980	1980	1980	1980	1980	1980	1980	1980	1981	1980	1980

[a] Information based on reply from the Ministry of Social Affairs

[b] Information based on reply from Ankara. Other replies were received from Hacettepe, Cerrahpaşa-Istanbul, Çukurova-Adana, Eskişehir and Bursa

[c] At present specialist training is subject to special investigation

[d] Doctors and specialists from other European Community countries may claim right of establishment and freedom to provide services, since 1977

[e] Specialist training required for general practice

TABLE 2

TRAINING REQUIREMENTS
IN INDIVIDUAL COUNTRIES

Algeria

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	3	No	3				
Clinical pharmacology	–	–	–	–	–	–	–
Clinical physiology							
Dermatology/dermato-venereology	3	No	3	–		Yes	Yes
Epidemiology/community medicine (social medicine)	3	No	3			Yes	Yes
Forensic/legal medicine	3	No	3	–		Yes	Yes
General practice/family practice/general medicine	Integrated with social medicine (see Epidemiology/community medicine)						
Internal medicine	4	No	2	2	–	Yes	Yes
Cardiology	3	No	3	–	–	Yes	Yes
Chest medicine/tuber-culosis	3	No	3	–	–	Yes	Yes
Neurology/neuropsychiatry	3	No	3	–	–	Yes	Yes
Obstetrics and gynaecology	4	No	4	–	–	Yes	Yes
Oncology	–	–	–	–	–	–	–

Ophthalmology	3	No	3	—	—	Yes	Yes
Occupational health/industrial medicine	See Epidemiology/community medicine						
Paediatrics	4	No	4	—	—	Yes	Yes
Parasitic diseases (tropical medicine) and communicable diseases	3	No	3	—	—	Yes	Yes
Pathology	—	—	—	—	—	—	—
Clinical chemistry/biochemistry	3	No	3	—	—	Yes	Yes
Genetics (medical)	—	—	—	—	—	—	—
Haematology	3	No	3	—	—	Yes	Yes
Immunology							
Microbiology	3	No	3	—	—	Yes	Yes
Morbid anatomy (histopathology)	3	No	3	—	—	Yes	Yes
Psychiatry	3	No	3	—	—	Yes	Yes
Public health (hygiene)	See Epidemiology/community medicine						
Radiodiagnosis	3	No	3	—	—	Yes	Yes
Radiotherapy	—	—	—	—	—	—	—
Surgery — general	4	No	4	—	—	Yes	Yes
Neurosurgery	4	No	4	—	—	Yes	Yes
Orthopaedics	4	No	4	—	—	Yes	Yes
Otorhinolaryngology	3	No	3	—	—	Yes	Yes
Thoracic/cardiac/cardiothoracic surgery	4	No	4	—	—	Yes	Yes
Traumatology/accident surgery	See Orthopaedics						
Urology	4	No	4	—	—	Yes	Yes

Austria

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	6	Yes	3	3	No	No	No
Clinical pharmacology							
Clinical physiology							
Dermatology/dermato-venereology	6	Yes	4	2	No	No	No
Epidemiology/community medicine							
Forensic/legal medicine	6	Yes	4	2	No	No	No
General practice	3	Yes	3		No	No	No
Internal medicine	6	Yes	5	1	No	No	No
Cardiology							
Chest medicine/tuber-culosis	6	Yes	4	2	No	No	No
Neurology	6	Yes	5	1	No	No	No
Obstetrics and gynaecology	6	Yes	4	2	No	No	No
Oncology							

Ophthalmology	6	Yes	5	1	No	No	No
Industrial medicine							
Paediatrics	6	Yes	4	2	No	No	No
Tropical medicine							
Pathology	6	Yes	4	2	No	No	No
Clinical chemistry/biochemistry[a]	6	Yes	4	2	No	No	No
Genetics (medical)							
Haematology[b]	6	Yes	4	2	No	No	No
Immunology							
Microbiology[b]	6	Yes	4	2	No	No	No
Morbid anatomy (histopathology)[c]	6	Yes	4	2	No	No	No
Psychiatry	6	Yes	5	1	No	No	No
Public health (hygiene)	6	Yes	4	2	No	No	No
Radiodiagnosis	6	Yes	4½	1½	No	No	No
Radiotherapy							
Surgery — general	6	Yes	4	2	No	No	No
Neurosurgery	6	Yes	4½	1½	No	No	No
Orthopaedics	6	Yes	3½	2½	No	No	No
Otorhinolaryngology	6	Yes	4	2	No	No	No
Thoracic/cardiac/cardiothoracic surgery							
Accident surgery	6	Yes	3	3	No	No	No
Urology	6	Yes	4	2	No	No	No

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Belgium

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column: Minimum period of training required in the specialty itself (years)	From total given in first column: Training required in other fields (years)	Type of examination: Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	4	No	4		No	No	No
Clinical pharmacology							
Clinical physiology							
Dermatovenereology	4	No	4		No	No	No
Epidemiology/community medicine							
Forensic/legal medicine							
General practice	2[a]	No	2				
Internal medicine	5	No	5		No	No	No
Cardiology	5	No	5		No	No	No
Chest medicine	5	No	5		No	No	No
Neuropsychiatry	5	No	5		No	No	No
Obstetrics and gynaecology	[illegible]	No	5		No	No	No
Oncology							

Ophthalmology	3[b]	No	3[b]		No	No	No
Industrial medicine	[c]						
Paediatrics	5	No	5		No	No	No
Tropical medicine	[c]						
Pathology							
Clinical chemistry/biochemistry[d]	5		1½	1½-3½	No	No	No
Genetics (medical)							
Haematology[d]	5		1½	1½-3½	No	No	No
Immunology							
Microbiology[d]	5		1½	1½-3½	No	No	No
Morbid anatomy (histopathology)[d]	5						
Psychiatry							
Public health (hygiene)							
Radiodiagnosis	4[b]	No	4[b]		No	No	No
Radiotherapy	4[b]	No	4[b]		No	No	No
Surgery — general[e]	6	No	6		No	No	No
Neurosurgery[e]	6	No	6		No	No	No
Orthopaedics[e]	6	No	6		No	No	No
Otorhinolaryngology	3[b]	No	3[b]		No	No	No
Thoracic/cardiac/cardiothoracic surgery[e]	5	No	5		No	No	No
Traumatology/accident surgery							
Urology[e]	6	No	6		No	No	No

Bulgaria

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	3	No	2¾	¼	Yes	—	Yes
Clinical pharmacology	3	No	3	—	Yes	—	Yes
Clinical physiology	3	No	3	—	Yes	—	Yes
Dermatology/dermato-venereology	3	No	3	—	Yes	—	Yes
Epidemiology/community medicine	3	No	3	—	Yes	—	Yes
Forensic/legal medicine	3	No	3	—	Yes	—	Yes
General practice/family practice/general medicine	—	—	—	—	—	—	—
Internal medicine	4	No	4	—	Yes	—	Yes
Cardiology	1½	No	1½	—	Yes	—	Yes
Chest medicine/tuber-culosis	4	No	3⅛	⅞	Yes	—	Yes
Neurology/neuropsychiatry	3	No	3	—	Yes	—	Yes
Obstetrics and gynaecology	4	No	4	—	Yes	—	Yes
Oncology	—	—	—	—	—	—	—

Ophthalmology	3	No	3	—	Yes	—	Yes
Occupational health/ industrial medicine	3	No	2¾	¼	Yes	—	Yes
Paediatrics	4	No	4	—	Yes	—	Yes
Parasitic diseases (tropical medicine)	3	No	2⅓	⅔	Yes	—	Yes
Pathology	—	—	—	—	—	—	—
Clinical chemistry/bio-chemistry	3	No	3	—	Yes	—	Yes
Genetics (medical)	3	No	3	—	Yes	—	Yes
Haematology	1½	No	1½	—	Yes	—	Yes
Immunology	—	—	—	—	—	—	—
Microbiology	3	No	3	—	Yes	—	Yes
Morbid anatomy (histopathology)	3	No	3	—	Yes	—	Yes
Psychiatry	3	No	3	—	Yes	—	Yes
Public health (hygiene)	3	No	3	—	Yes	—	Yes
Radiodiagnosis	—	—	—	—	—	—	—
Radiotherapy	—	—	—	—	—	—	—
Surgery — general	4	No	4	—	Yes	—	Yes
Neurosurgery	4	No	3¾	¼	Yes	—	Yes
Orthopaedics	4	No	3¾	¾	Yes	—	Yes
Otorhinolaryngology	3	No	3	—	Yes	—	Yes
Thoracic/cardiac/cardiothoracic surgery	—	—	—	—	—	—	—
Traumatology/accident surgery	—	—	—	—	—	—	—
Urology	4	No	2¾	1¼	Yes	—	Yes

Czechoslovakia[a]

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	6	No	5½	½	Yes	Yes	Yes
Clinical pharmacology	6	No	3	3	Yes	Yes	Yes
Clinical physiology	—	—	—	—	—	—	—
Dermatology/dermato-venereology	6	No	5½	½	Yes	Yes	Yes
Epidemiology/community medicine	6	No	3	3	Yes	Yes	Yes
Forensic/legal medicine	6	No	3	3	Yes	Yes	Yes
General practice/family practice/general medicine	6	No	4½	1½	Yes	Yes	Yes
Internal medicine	6	No	5½	½	Yes	Yes	Yes
Cardiology	6	No	3	3	Yes	Yes	Yes
Chest medicine/tuberculosis	6	No	3	3	Yes	Yes	Yes
Neurology/neuropsychiatry	6	No	5½	½	Yes	Yes	Yes
Obstetrics and gynaecology	7	No	6	1	Yes	Yes	Yes
Oncology	6	No	3	3	Yes	Yes	Yes

Ophthalmology	7	No	6	1	Yes	Yes	Yes
Occupational health/ industrial medicine	6	No	3	3	Yes	Yes	Yes
Paediatrics	6	No	5½	½	Yes	Yes	Yes
Parasitic diseases (tropical medicine)	—	—	—	—	—	—	—
Pathology	—	—	—	—	—	—	—
Clinical chemistry/bio-chemistry	6	No	5½	½	Yes	Yes	Yes
Genetics (medical)	6	No	3	3	Yes	Yes	Yes
Haematology	6	No	3	3	Yes	Yes	Yes
Immunology	6	No	3	3	Yes	Yes	Yes
Microbiology	6	No	5½	½	Yes	Yes	Yes
Morbid anatomy (histopathology)	6	No	5½	½	Yes	Yes	Yes
Psychiatry	6	No	5½	½	Yes	Yes	Yes
Public health (hygiene)	6	No	5½	½	Yes	Yes	Yes
Radiodiagnosis	6	No	5½	½	Yes	Yes	Yes
Radiotherapy	6	No	5½	½	Yes	Yes	Yes
Surgery — general	8	No	6½	1½	Yes	Yes	Yes
Neurosurgery	8	No	3	5	Yes	Yes	Yes
Orthopaedics	8	No	6½	1½	Yes	Yes	Yes
Otorhinolaryngology	7	No	6	1	Yes	Yes	Yes
Thoracic/cardiac/cardiothoracic surgery	8	No	3	5	Yes	Yes	Yes
Traumatology/accident surgery	8	No	3	5	Yes	Yes	Yes
Urology	7	No	5½	1½	Yes	Yes	Yes

Denmark

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column: Minimum period of training required in the specialty itself (years)	From total given in first column: Training required in other fields (years)	Type of examination: Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	4	No	4	0	No	No	No
Clinical pharmacology	—	—	—	—	—	—	—
Clinical physiology	4	No	3	1	No	No	No
Dermatology/dermato-venereology	4	No	3	1	No	No	No
Epidemiology/community medicine	—	—	—	—	—	—	—
Forensic/legal medicine	—	—	—	—	—	—	—
General practice/family practice, general medicine							
Internal medicine	4½	No	3½	1	No	No	No
Cardiology	4½	No	3	1½	No	No	No
Chest medicine/tuber-culosis	4½	No	3½	1	No	No	No
Neurology/neuropsychiatry	5	No	3	2	No	No	No
Obstetrics and gynaecology	4½	No	3	1½	No	No	No
Oncology	—	—	3	—	No	No	No

Ophthalmology	4	No	3	1	No	No	No
Occupational health/ industrial medicine	—	—	—	—	No	No	No
Paediatrics	4	No	3	1	No	No	No
Parasitic diseases (tropical medicine)	4½	No	3½	1	No	No	No
Pathology							
Clinical chemistry/biochemistry	4	No	3	1	No	No	No
Genetics (medical)							
Haematology							
Immunology							
Microbiology	6	No	5	1	No	No	No
Morbid anatomy (histopathology)	5	No	5	—	No	No	No
Psychiatry	5	No	4	1	No	No	No
Public health (hygiene)	—	—	—	—	No	No	No
Radiodiagnosis	4	No	3	1	No	No	No
Radiotherapy	4	No	3	1	No	No	No
Surgery — general	5½	No	5	½	No	No	No
Neurosurgery	5½	No	4	1½	No	No	No
Orthopaedics	5½	No	5	½	No	No	No
Otorhinolaryngology	4	No	3	1	No	No	No
Thoracic/cardiac/cardiothoracic surgery	5½	No	5	½	No	No	No
Traumatology/accident surgery	—	—	—	—	No	No	No
Urology	5½	No	5	½	No	No	No

Finland

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column: Minimum period of training required in the specialty itself (years)	From total given in first column: Training required in other fields (years)	Type of examination: Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	6	No	4	2	No	Yes	No
Clinical pharmacology	6	No	3	3	No	Yes	No
Clinical physiology	6	No	4	2	No	Yes	No
Dermatology/dermato-venereology	6	No	4	2	No	Yes	No
Epidemiology/community medicine							
Forensic/legal medicine	6	No	3	3	No	Yes	No
General practice/family practice/general medicine	6	No	3	3	No	Yes	No
Internal medicine	6	No	5	1	No	Yes	No
Cardiology[a]	2	No	2	—	No	Yes	No
Chest medicine/tuber-culosis	6	No	3	3	No	Yes	No
Neurology/neuropsychiatry	6	No	4	2	No	Yes	No
Obstetrics and gynaecology	6	No	4	2	No	Yes	No
Oncology	See Radiotherapy						

Ophthalmology	6	No	4	2	No	Yes	No
Occupational health/ industrial medicine	6	No	3	3	No	Yes	No
Paediatrics	6	No	4	2	No	Yes	No
Infectious diseases[a]	2	No	2	—	No	Yes	No
Pathology	6	No	4	2	No	Yes	No
Clinical chemistry/biochemistry[b]	6	No	3	3	No	Yes	No
Genetics (medical)							
Haematology[c]	2	No	2	—	No	Yes	No
Immunology[d]	2	No	2	—	No	Yes	No
Clinical microbiology[b]	6	No	4	2	No	Yes	No
Morbid anatomy (histopathology)							
Psychiatry	6	No	4	2	No	Yes	No
Public health (hygiene)	6	No	3	3	No	Yes	No
Radiodiagnosis	6	No	4	2	No	Yes	No
Radiotherapy	6	No	4	2	No	Yes	No
Surgery — general	6	No	4½	1½	No	Yes	No
Neurosurgery[b]	6	No	5	1	No	Yes	No
Orthopaedics and traumatology[e]	2	No	2	—	No	Yes	No
Otorhinolaryngology[b]	6	No	4	2	No	Yes	No
Thoracic/cardiac/cardiothoracic surgery[e]	2	No	2	—	No	Yes	No
Traumatology			See Orthopaedics				
Urology[e]	2	No	2	—	No	Yes	No

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France

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	3	No	3	—	No	Yes	No
Clinical pharmacology							
Clinical physiology							
Dermatology/dermato-venereology	3	No	3	—	No	Yes	Yes
Epidemiology/community medicine							
Forensic/legal medicine	1	No	1	—	No	Yes	Yes
General practice/family practice/general medicine							
Internal medicine	4	Yes[a]	4	—	No	Yes	Yes
Cardiology	3	No	3	—	No	Yes	Yes
Chest medicine/tuber-culosis	3	No	3	—	No	Yes	Yes
Neurology/neuropsychiatry	3	No	3	—	No	Yes	Yes
Obstetrics and gynaecology	4	Yes[a]	3	—	No	Yes	Yes
Oncology							

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Ophthalmology	3	No	3	—	No	Yes	Yes
Occupational health/ industrial medicine	2	No	2	—	No	Yes	Yes
Paediatrics	3	No	3	—	No	Yes	Yes
Parasitic diseases (tropical medicine)	1	No	1	—	No	Yes	Yes
Pathology							
Clinical chemistry/biochemistry							
Genetics (medical)							
Haematology	1	No	1	—	No	Yes	Yes
Immunology	1	No	1	—	No	Yes	Yes
Microbiology							
Morbid anatomy (histopathology)	3	No	3	—	No	Yes	Yes
Psychiatry	3	No	3	—	No	Yes	Yes
Public health (hygiene)	1	No	1	—	No	Yes	Yes
Radiodiagnosis			Combined with Radiotherapy				
Radiotherapy	3	No	3	—	No	Yes	Yes
Surgery — general	5	Yes[a]	4	—	No	Yes	Yes
Neurosurgery	5	Yes	4	—	No	Yes	Yes
Orthopaedics	5	Yes	4	—	No	Yes	Yes
Otorhinolaryngology	3	No	3	—	No	Yes	Yes
Thoracic/cardiac/cardiothoracic surgery	5	Yes	4	—	No	Yes	Yes
Traumatology/accident surgery	5	Yes	4	—	No	Yes	Yes
Urology	5	Yes	4	—	No	Yes	Yes

German Democratic Republic

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	4-5	No	3½	½-1½	Yes	No	No
Clinical pharmacology[a]	2	No	2	—	No	No	No
Physiology	4-5	No	4	—	Yes	No	No
Dermatology/dermato-venereology	4-5	No	4	—	Yes	No	No
Epidemiology/community medicine	4-5	No	3½	½	Yes	No	No
Forensic/legal medicine	4-5	No	3	1	Yes	No	No
General practice/family practice/general medicine	4-5	No	2½	1½	Yes	No	No
Internal medicine	4-5	No	3½	½	Yes	No	No
Cardiology	2	No	2	—	No	No	No
Chest medicine/tuber-culosis	2	No	2	—	No	No	No
Neurology/neuropsychiatry	4-5	No	4	—	Yes	No	No
Obstetrics and gynaecology	4-5	No	4	—	Yes	No	No
Oncology	—	—	—	—	—	—	—

Ophthalmology	4-5	No	4	—	Yes	No	No
Occupational health/ industrial medicine	4-5	No	3	1	Yes	No	No
Paediatrics	4-5	No	4	—	Yes	No	No
Parasitic diseases (tropical medicine)	—	—	—	—	—	—	—
Pathophysiology	4-5	No	3	1	Yes	No	No
Clinical chemistry/bio-chemistry	4-5	No	4	—	Yes	No	No
Genetics (medical)	—	—	—	—	—	—	—
Haematology	—	—	—	—	—	—	—
Immunology	—	—	—	—	—	—	—
Microbiology	4-5	No	3½	½	Yes	No	No
Morbid anatomy (histopathology)	4-5	No	4	—	Yes	No	No
Psychiatry	—	—	—	—	—	—	—
Public health (hygiene)	4-5	No	3	1	Yes	No	No
Radiology	4-5	No	4	—	Yes	No	No
Radiotherapy	—	—	—	—	—	—	—
Surgery — general	4-5	No	4	—	Yes	No	No
Neurosurgery	4-5	No	4	—	Yes	No	No
Orthopaedics	4-5	No	3½	½	Yes	No	No
Otorhinolaryngology	4-5	No	3¾	¼	Yes	No	No
Thoracic/cardiac/cardiothoracic surgery	—	—	—	—	—	—	—
Traumatology/accident surgery	3	No	2¾	¼	No	No	No
Urology	4-5	No	3	1	Yes	No	No

Federal Republic of Germany

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	4	Yes	3½	½	Yes	No	No
Clinical pharmacology	5	Yes	4	1	Yes	No	No
Clinical physiology							
Dermatology/dermato-venereology	4	Yes	4	—	Yes	No	No
Epidemiology/community medicine							
Forensic/legal medicine	5	Yes	4½	½	Yes	No	No
General practice/family practice/general medicine	4	Yes	—	2½	Yes	No	No
Internal medicine	6	Yes	5½	½	Yes	No	No
Cardiology	6	Yes			Yes	No	No
Chest medicine/tuber-culosis	6	Yes			Yes	No	No
Neurology	4	Yes	3	1	Yes	No	No
Neuropsychiatry	5	Yes	4	1	Yes	No	No
Obstetrics and gynaecology	5	Yes	4½	½	Yes	No	No
Oncology	—	—	—	—	—	—	—

Ophthalmology	4	Yes	—	—	Yes	No	No
Occupational health/ industrial medicine	4	Yes	—	—	Yes	No	No
Paediatrics	5	Yes	4½	½	Yes	No	No
Parasitic diseases (tropical medicine)							
Pathology	5	Yes	4	1	Yes	No	No
Clinical chemistry/bio-chemistry							
Genetics (medical)							
Haematology (serological medicine)	6	Yes			Yes	No	No
Immunology							
Microbiology	5	Yes	4	1	Yes	No	No
Morbid anatomy (histopathology)							
Psychiatry	4	Yes	3	1	Yes	No	No
Public health (hygiene)	5	Yes	2½	2½	Yes	No	No
Radiology	5	Yes	4½	½	Yes	No	No
Radiotherapy			See Radiology				
Surgery — general	6	Yes	5½	½	Yes	No	No
Neurosurgery	6	Yes	5	1	Yes	No	No
Orthopaedics	5	Yes	4	1	Yes	No	No
Otorhinolaryngology	4	Yes	4	—	Yes	No	No
Thoracic/cardiac/cardiothoracic surgery	6	Yes	5½	½	Yes	No	No
Accident surgery	6	Yes	5½	½	Yes	No	No
Urology	5	Yes	4	1	Yes	No	No

Greece

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column: Minimum period of training required in the specialty itself (years)	From total given in first column: Training required in other fields (years)	Type of examination: Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	3	[a]	2	1	Yes	No	Yes
Clinical pharmacology	—	—	—	—	—	—	—
Clinical physiology							
Dermatology/dermato-venereology	3	No	—	—	Yes	No	Yes
Epidemiology/community medicine	—	—	—	—	—	—	—
Forensic/legal medicine	3	No	1[b]	2[b]	Yes	No	Yes
General practice/family practice/general medicine	1½	No	1	½[c]	Yes	No	Yes
Internal medicine	3	No			Yes	No	Yes
Cardiology	4	No	1	3	Yes	No	Yes
Chest medicine/tuber-culosis	3	No	2	1	Yes	No	Yes
Neurology/neuropsychiatry	3	No	2	1	Yes	No	Yes
Obstetrics and gynaecology	4	No	3	1	Yes	No	Yes
Oncology	—	—	—	—	—	—	—

Ophthalmology	3	No	2¼	¾[b]	Yes	No	Yes
Occupational health/ industrial medicine	—	—	—	—	—	—	—
Paediatrics	3	[a]	2	1	Yes	No	[illegible]
Parasitic diseases (tropical medicine)	—	—	—	—	—	—	—
Pathology	4	[a]	4	—	Yes	No	Yes
Clinical chemistry/biochemistry	5	[a]	5			Without exams	
Genetics (medical)	—	—	—	—	—	—	—
Haematology	5	No	2	3	Yes	No	Yes
Immunology	—	—	—	—	—	—	—
Microbiology	3	No			Yes	No	Yes
Morbid anatomy (histopathology)	—	—	—	—	—	—	—
Psychiatry	—	—	—	—	—	—	—
Public health (hygiene)	1	—	—	—	—	—	—
Radiodiagnosis	3	[a]	1¼	1¾[d]	Yes	No	Yes
Radiotherapy[e]	5	[a]	2[e]			Without exams	
Surgery — general	4	No	4		Yes	No	Yes
Neurosurgery	5	No	3	2[b]	Yes	No	Yes
Orthopaedics	4	—	3	1	Yes	No	Yes
Otorhinolaryngology	3	No	2	1	Yes	No	Yes
Thoracic/cardiac/cardiothoracic surgery	7	No	2	1⅓[b]		Without exams	
Traumatology/accident surgery	—	—	—	—	—	—	—
Urology	4	—	3	1	Yes	No	Yes

Hungary

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (months)[a]	Training required in other fields (months)[a]	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	4		42	6	Yes	No	Yes
Clinical pharmacology	2		24	—	Yes	No	Yes
Clinical physiology	—		—	—	—	—	—
Dermatology/dermato-venereology	4		48	—	Yes	No	Yes
Epidemiology/community medicine	4		45	3	Yes	No	Yes
Forensic/legal medicine	4		34½	13½	Yes	No	Yes
General practice/family practice/general medicine	5		49	11	Yes	No	Yes
Internal medicine	5		50½	9½	Yes	No	Yes
Cardiology	2		24	—	Yes	No	Yes
Chest medicine/tuber-culosis	2		24	—	Yes	No	Yes
Neurology/neuropsychiatry	4		41½	6½	Yes	No	Yes
Obstetrics and gynaecology	4		41½	6½	Yes	No	Yes
Oncology	2		18	6	Yes	No	Yes

Ophthalmology	4	48	—	Yes	No	Yes
Occupational health/ industrial medicine	4	38	10	Yes	No	Yes
Paediatrics	4	41½	6½	Yes	No	Yes
Parasitic diseases (tropical medicine)	2	24	—	Yes	No	Yes
Pathology	4	42	6	Yes	No	Yes
Clinical chemistry/biochemistry	—	—	—	—	—	—
Genetics (medical)	—	—	—	—	—	—
Haematology	2	24	—	Yes	No	Yes
Immunology	—	—	—	—	—	—
Microbiology	2	24	—	Yes	No	Yes
Morbid anatomy (histopathology)	—	—	—	—	—	—
Psychiatry	4	44½	3½	Yes	No	Yes
Public health (hygiene)	4	42	6	Yes	No	Yes
Radiodiagnosis	4	39	9	Yes	No	Yes
Radiotherapy	4	24	24	Yes	No	Yes
Surgery — general	4	36	6	Yes	No	Yes
Neurosurgery	3	24	12	Yes	No	Yes
Orthopaedics	4	42	6	Yes	No	Yes
Otorhinolaryngology	4	48	—	Yes	No	Yes
Thoracic/cardiac/cardiothoracic surgery	2	18	6	Yes	No	Yes
Traumatology/accident surgery	2	22	2	Yes	No	Yes
Urology	4	45	3	Yes	No	Yes

Iceland

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	4½	No	3	1½	No	No	No
Clinical pharmacology	4-4½	No			No	No	No
Clinical physiology	4	No			No	No	No
Dermatology/dermato-venereology	4½	No	3	1½	No	No	No
Epidemiology/community medicine	4½	No	1[a]	4	Yes	Yes	Yes
Forensic/legal medicine	4-4½	No			No	No	No
General practice/family practice/general medicine	4½	No	1	3½	No	No	No
Internal medicine (general)	4½	No	3½	1	No	No	No
Cardiology	4½	No	2	2½	No	No	No
Chest medicine/tuber-culosis	4½	No	2	2½	No	No	No
Neurology/neuropsychiatry	4½	No	2	2½	No	No	No
Obstetrics and gynaecology	4½	No	2½	2	No	No	No
Oncology	4½	No	2	2½	No	No	No

Ophthalmology	4	No	3	1	No	No	No
Occupational health/ industrial medicine							
Paediatrics	4½	No	3	1½	No	No	No
Parasitic diseases (tropical medicine)							
Pathology	4	No	3	1	No	No	No
Clinical chemistry/ biochemistry	4	No	3	1	No	No	No
Genetics (medical)	4	No			No	No	No
Haematology	4	No	3	1	No	No	No
Immunology	4	No	3	1	No	No	No
Microbiology	4	No	3	1	No	No	No
Morbid anatomy (histopathology)	4	No			No	No	No
Psychiatry	4½	No	3	1½	No	No	No
Public health (hygiene)	4½	No	1[a]	4	No	Yes	No
Radiodiagnosis	4½	No	3½	1	No	No	No
Radiotherapy	4½	No	3	1½	No	No	No
Surgery — general	4½	No	3½	1	No	No	No
Neurosurgery	4½	No	3	1½	No	No	No
Orthopaedics	4½	No	3	1½	No	No	No
Otorhinolaryngology	4	No	3	1	No	No	No
Thoracic/cardiac/ cardiothoracic surgery	4½	No	2	2½	No	No	No
Traumatology/ accident surgery	4½	No	3	1½	No	No	No
Urology	4½	No	2	2½	No	No	No

Ireland

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	6	No	—	—	Yes	Yes	Yes
Clinical pharmacology	7	No	—	—	Yes	Yes	Yes
Clinical physiology	—						
Dermatology/dermato-venereology	7	No	—	—	Yes	Yes	Yes
Epidemiology/community medicine	6	No	—	—	Yes	Yes	Yes
Forensic/legal medicine	—						
General practice/family practice/general medicine	3	No	—	—	Yes	Yes	Yes
Internal medicine	7	No	—	—	Yes	Yes	Yes
Cardiology	7	No	—	—	Yes	Yes	Yes
Chest medicine/tuber-culosis	7	No	—	—	Yes	Yes	Yes
Neurology/neuropsychiatry	7	No	—	—	Yes	Yes	Yes
Obstetrics and gynaecology	7	No	—	—	Yes	Yes	Yes
Oncology	7	No	—	—	Yes	Yes	Yes

Ophthalmology	7	No	—	—	Yes	Yes	Yes
Occupational health/ industrial medicine	6	No	—	—	Yes	Yes	Yes
Paediatrics	7	No	—	—	Yes	Yes	Yes
Parasitic diseases (tropical medicine)							
Pathology	6	No	—	—	Yes	Yes	Yes
Clinical chemistry/bio-chemistry	6	No	—	—	Yes	Yes	Yes
Genetics (medical)							
Haematology	6	No	—	—	Yes	Yes	Yes
Immunology	7	No	—	—	Yes	Yes	Yes
Microbiology	6	No	—	—	Yes	Yes	Yes
Morbid anatomy (histopathology)	6	No	—	—	Yes	Yes	Yes
Psychiatry	7	No	—	—	Yes	Yes	Yes
Public health (hygiene)			See Epidemiology/community medicine				
Radiodiagnosis	6	No	—	—	Yes	Yes	Yes
Radiotherapy	6	No	—	—	Yes	Yes	Yes
Surgery — general	7	No	—	—	Yes	Yes	Yes
Neurosurgery	8	No	—	—	Yes	Yes	Yes
Orthopaedics	7	No	—	—	Yes	Yes	Yes
Otorhinolaryngology	6	No	—	—	Yes	Yes	Yes
Thoracic/cardiac/cardiothoracic surgery	7	No	—	—	Yes	Yes	Yes
Traumatology/accident surgery	7	No	—	—	Yes	Yes	Yes
Urology	6	No	—	—	Yes	Yes	Yes

Italy

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column: Minimum period of training required in the specialty itself (years)	From total given in first column: Training required in other fields (years)	Type of examination: Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	3	No	3		No	No	Yes
Clinical pharmacology	3-4[a]		3				
Clinical physiology							
Dermatology/dermato-venereology	3	No	3		Yes	No	Yes
Epidemiology/community medicine	4	No			Yes	No	Yes
Forensic/legal medicine	3	No			Yes	No	No
General practice/family practice/general medicine	—	—	—		—	—	—
Internal medicine	5	No	3		Yes	No	Yes
Cardiology	3-4[a]	No	3		Yes	No	Yes
Chest medicine/tuber-culosis	3-4[a]	No	3		Yes	No	Yes
Neurology/neuropsychiatry	4	No	3		Yes	No	Yes
Obstetrics and gynaecology	4	No	3		Yes	No	Yes
Oncology	3	No			—	—	—

Ophthalmology	4	No	3	Yes	No	Yes
Occupational health/ industrial medicine	4	No	3	Yes	No	Yes
Paediatrics	4	No	3	Yes	No	Yes
Parasitic diseases (tropical medicine)	3	No	3	Yes	No	Yes
Pathology	4	No	3	Yes	No	Yes
Clinical chemistry/bio-chemistry	3	No	3	Yes	No	Yes
Genetics (medical)	3	No	3	Yes	No	Yes
Haematology	3	No	3	Yes	No	Yes
Immunology	3	No	3			
Microbiology	4	No	3	Yes	No	Yes
Morbid anatomy (histopathology)	3	No	3	Yes	No	Yes
Psychiatry	4	No	3	Yes	No	Yes
Public health (hygiene)	4	No	3	Yes	No	Yes
Radiodiagnosis	4	No	3	Yes	No	Yes
Radiotherapy	4	No	3	Yes	No	Yes
Surgery — general	5	Yes	3	No	No	Yes
Neurosurgery	5	No	3	Yes	No	Yes
Orthopaedics	4	No	3	Yes	No	Yes
Otorhinolaryngology	3	No	3	Yes	No	Yes
Thoracic/cardiac/cardiothoracic surgery	5	No	3	Yes	No	Yes
Traumatology/accident surgery	5	No		Yes	No	Yes
Urology	3-5[a]	No	3	Yes	No	Yes

Luxembourg

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	4	No	4				
Clinical pharmacology							
Clinical physiology							
Dermatology/dermato-venereology	3	No	3				
Epidemiology/community medicine							
Forensic/legal medicine							
General practice/family practice/general medicine			Not regarded as a specialty				
Internal medicine	5	No	5				
Cardiology	4	No	4				
Chest medicine/tuber-culosis	5	No	5				
Neurology/neuropsychiatry	4	No	4				
Obstetrics and gynaecology	4	No	4				
Oncology							

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Ophthalmology	4	No	4	
Occupational health/ industrial medicine				
Paediatrics	4	No	4	
Parasitic diseases (tropical medicine)				
Pathology				
Clinical chemistry/biochemistry	4	No	4	
Genetics (medical)				
Haematology	7		3	4[a]
Immunology				
Microbiology	4	No	4	
Morbid anatomy (histopathology)	4	No	4	
Psychiatry	4	No	4	
Public health (hygiene)				
Radiodiagnosis	4	No	4	
Radiotherapy	4	No	4	
Surgery — general	6	No	6	
Neurosurgery	6	No	6	
Orthopaedics	5	No	5	
Otorhinolaryngology	4	No	4	
Thoracic/cardiac/cardiothoracic surgery	6	No	6	
Traumatology/accident surgery				
Urology	6	No	6	

Netherlands

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	3½	No	3	½	No	No	No
Clinical pharmacology							
Clinical physiology							
Dermatology	4	—	—	—	No	No	No
Epidemiology/community medicine							
Forensic/legal medicine							
General practice/family practice/general medicine	1						
Internal medicine	5	No	5	0	No	No	No
Cardiology	5	Yes	3	1-2	No	No	No
Chest medicine/tuberculosis	5	Yes	3	2	No	No	No
Neurology/neuropsychiatry	4	No	3	1	No	No	No
Obstetrics and gynaecology	5	No	5	0	No	No	No
Oncology							

Ophthalmology	4	No	4	0	No	No	No
Occupational health/ industrial medicine							
Paediatrics	4	No	4	0	No	No	No
Parasitic diseases (tropical medicine)							
Pathology							
Clinical chemistry/bio-chemistry							
Genetics (medical)							
Haematology							
Immunology							
Microbiology	4	No	4	0	No	No	No
Morbid anatomy (histopathology)	4	No	4	0	No	No	No
Psychiatry	4	No	3	1	No	No	No
Public health (hygiene)							
Radiodiagnosis	4	No	4	0	No	No	No
Radiotherapy	4	No	3¾	¼	No	No	No
Surgery — general	6	No	6	0	No	No	No
Neurosurgery	6	No	4	2	No	No	No
Orthopaedics	6	No	4	2	No	No	No
Otorhinolaryngology	4	No	4	0	No	No	No
Cardiothoracic surgery	6	No	4	2	No	No	No
Traumatology/acci-dent surgery							
Urology	6	No	3	3	No	No	No

Norway

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	5	No	4	1	No	No	No
Clinical pharmacology							
Clinical physiology	4	No	4		No	No	No
Dermatology/dermato-venereology	4	No	3	1	No	No	No
Epidemiology/community medicine			In process of planning				
Forensic/legal medicine							
General practice/family practice/general medicine	3	No	2	1[a]	No	No	No
Internal medicine	6	No	5	1	No	No	No
Cardiology	6	No	2[b]	4	No	No	No
Chest medicine/tuberculosis[c]	5½	No	3[b]	2½	No	No	No
Neurology/neuropsychiatry	5	No	3½	1½	No	No	No
Obstetrics and gynaecology	5½	No	4	1½	No	No	No
Oncology and radiotherapy	5	No	3	2	No	No	No

Ophthalmology	4½	No	3	1½	No	No	No
Occupational health/ industrial medicine	5	No	3	2	No	No	No
Paediatrics	5	No	4	1	No	No	No
Parasitic diseases (tropical medicine)[d]	6	No	3[e]	3	No	No	No
Pathology	5	No	4	1	No	No	No
Clinical chemistry/bio-chemistry	5	No	3	2	No	No	No
Genetics (medical)	5	No	4	1	No	No	No
Haematology							
Immunology	5	No	4	1	No	No	No
Microbiology	5	No	4	1	No	No	No
Morbid anatomy (histopathology)							
Psychiatry	5	No	4	1	No	No	No
Public health (hygiene)							
Radiodiagnosis	5	No	4	1[f]	No	No	No
Radiotherapy and oncology	5	No	3	2	No	No	No
Surgery — general	6	No	5	1	No	No	No
Neurosurgery	6	No	4	2[g]	No	No	No
Orthopaedics	8	No	3[g]	5[h]	No	No	No
Otorhinolaryngology	4½	No	3	1½	No	No	No
Thoracic/cardiac/cardiothoracic surgery	8	No	3[g]	5	No	No	No
Traumatology/accident surgery							
Urology	8	No	3[g]	5	No	No	No

Poland[a]

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)[b]	Training required in other fields (years)[c]	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	I°2 /II°2	No	4		Yes	Yes	Yes
Clinical pharmacology[d]	5	No	3	2	Yes		Yes
Clinical physiology	I°1½/II°3	No	4½		Yes		Yes
Dermatology/dermato-venereology	I°2 /II°2½	No	4½		Yes	Yes	Yes
Epidemiology/community medicine	[e]	No	II°3		Yes		Yes
Forensic/legal medicine	5	No	3	2	Yes		Yes
General practice/family practice/general medicine	I°2½/II°3	No	5½		Yes		Yes
Internal medicine	I°2 /II°3	No	5		Yes		Yes
Cardiology[f,g]	5	No	3	5-5½	Yes		Yes
Chest medicine/tuber-culosis	5	No	3	2	Yes		Yes
Neurology/neuropsychiatry	I°2 /II°3	No	5		Yes	Yes	Yes
Obstetrics and gynaecology	I°2½/II°3	No	5½		Yes	Yes	Yes
Oncology[f,h]							
Ophthalmology	I°1½/II°3	No	4½		Yes	Yes	Yes

Occupational health/ industrial medicine	I°2 /II°3	No	5		Yes		Yes
Paediatrics	I°2½/II°3	No	5½		Yes	Yes	Yes
Tropical medicine[h]	5	No	2	5	Yes		Yes
Pathology[h]	5	No	2	5	Yes		Yes
Clinical chemistry/bio-chemistry							
Genetics (medical)							
Haematology[g]	5	No	2	5	Yes		Yes
Immunology (allergology)[f]	2	No	2	5			
Microbiology							
Morbid anatomy (histopathology)	I°2 /II°2½	No	4½		Yes		Yes
Psychiatry	I°2½/II°3	No	5½		Yes	Yes	Yes
Public health (hygiene):							
social medicine	I°2	No	4		Yes		Yes
public health	II°2	No			Yes		Yes
Radiodiagnosis	I°2 /II°3	No	5		Yes		Yes
Radiotherapy	I°2 /II°3	No	5		Yes		Yes
Surgery — general	I°2 /II°4	No	6		Yes	Yes	Yes
Neurosurgery (after I° in surgery)	5½	No	II°3½	2	Yes		Yes
Orthopaedics and accident surgery	I°2 /II°3	No	5		Yes		Yes
Otorhinolaryngology	I°1½/II°3	No	4½		Yes		Yes
Thoracic/cardiac/cardiothoracic surgery[k]	5	No	3	2	Yes		Yes
Traumatology/accident surgery							
Urology[k]	5	No	3	2	Yes		Yes

Portugal

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination[a]		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	4	No	4		Yes	Yes	Yes
Clinical pharmacology	4	No	4		Yes	Yes	Yes
Clinical physiology	4	No	4		Yes	Yes	Yes
Dermatology/dermato-venereology	4	No	4		Yes	Yes	Yes
Epidemiology/community medicine	4	No	4		Yes	Yes	Yes
Forensic/legal medicine	4	No	4		Yes	Yes	Yes
General practice/family practice/general medicine	3	No	3		Yes	Yes	Yes
Internal medicine	5	No	5		Yes	Yes	Yes
Cardiology	4	No	4		Yes	Yes	Yes
Chest medicine/tuber-culosis	4	No	4		Yes	Yes	Yes
Neurology/neuropsychiatry	5	No	5		Yes	Yes	Yes
Obstetrics and gynaecology	5	No	5		Yes	Yes	Yes
Oncology	4	No	4		Yes	Yes	Yes

Ophthalmology	4	No	4	Yes	Yes	Yes
Occupational health/ industrial medicine	3	No	3	Yes	Yes	Yes
Paediatrics	5	No	5	Yes	Yes	Yes
Parasitic diseases (tropical medicine)						
Pathology	4	No	4	Yes	Yes	Yes
Clinical chemistry/bio-chemistry						
Genetics (medical)						
Haematology	4		4	Yes	Yes	Yes
Immunology	4		4	Yes	Yes	Yes
Microbiology						
Morbid anatomy (histopathology)	4		4			
Psychiatry	4		4	Yes	Yes	Yes
Public health (hygiene)	4		4	Yes	Yes	Yes
Radiodiagnosis	4		4	Yes	Yes	Yes
Radiotherapy	4	No	4	Yes	Yes	Yes
Surgery — general	5	No	5	Yes	Yes	Yes
Neurosurgery	5	No	5	Yes	Yes	Yes
Orthopaedics	5	No	5	Yes	Yes	Yes
Otorhinolaryngology	4	No	4	Yes	Yes	Yes
Thoracic/cardiac/cardiothoracic surgery	5	No	5	Yes	Yes	Yes
Traumatology/accident surgery	5	No	5	Yes	Yes	Yes
Urology	5	No	5	Yes	Yes	Yes

Spain

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination[a]		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	4	No	2	2			
Clinical pharmacology	3	No	3				
Clinical physiology	—	—	—	—	—	—	—
Dermatology/dermato-venereology	4	No	3	1			
Epidemiology/community medicine	3	No	2	1			
Forensic/legal medicine	—	—	—	—	—	—	—
General practice/family practice/general medicine	3	No	3				
Internal medicine	4	No	4				
Cardiology	5	No	4	1			
Chest medicine/tuber-culosis	3	No	3				
Neurology	4	No	3	1			
Obstetrics and gynaecology	4	No	4				
Oncology	4	No	2	2			

Ophthalmology	4	No	4	
Occupational health/ industrial medicine				
Paediatrics	4	No	4	
Parasitic diseases (tropical medicine)				
Pathology (histopathology)	4	No	4	
Clinical chemistry/biochemistry	3	No	3	
Genetics (medical)				
Haematology	4	No	2½	1½
Immunology	4	No	4	
Microbiology	3	No	3	
Morbid anatomy (histopathology)			See Pathology	
Psychiatry	4	No	4	
Public health (hygiene)			See Epidemiology/community medicine	
Radiodiagnosis	4	No	4	
Radiotherapy	4	No	3	1
Surgery — general	5	No	3	2
Neurosurgery	5	No	4	1
Orthopaedics/traumatology/accident surgery	5	No	3	2
Otorhinolaryngology	4	No	3	1
Thoracic/cardiac/cardiothoracic surgery	5	No	4	1
Traumatology/accident surgery			See Orthopaedics	
Urology	5	No	3	2

Sweden

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination[a]		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	4	No	3	1			
Clinical pharmacology	—	—	—	—	—	—	—
Clinical physiology	4½	No	4	½			
Dermatology/dermato-venereology	4	No	3	1			
Epidemiology/community medicine (social medicine)	4½	No	2	1½			
Forensic/legal medicine	4½	No	1½	3			
General practice/family practice/general medicine	4	No	½	3½			
Internal medicine	4½	No	4	½			
Cardiology	4½	No	2	2½			
Chest medicine/tuber-culosis	4½	No	2	2½			
Neurology/neuropsychiatry	4	No	3	1			
Obstetrics and gynaecology	4½	No	3	1½			
Oncology (general)[b]	4½	No	3	1½			

Ophthalmology	4	No	3½	½			
Occupational health/ industrial medicine	4½	No	2	2½			
Paediatrics	4	No	3	1			
Infectious diseases	4½	No	3	1½			
Pathology	4½	No	4	½			
Clinical chemistry/bio-chemistry	4½	No	4	½			
Genetics (medical)	—	—	—	—	—	—	—
Haematology	—	—	—	—	—	—	—
Immunology	4½	No	4	½			
Clinical bacteriology (microbiology)	4½	No	4	½			
Morbid anatomy (histopathology)	—	—	—	—	—	—	—
Psychiatry (general)	4½	No	3½	1			
Public health (hygiene)	—	—	—	—	—	—	—
Radiodiagnosis (diagnostic radiology)	4½	No	4	½			
Radiotherapy			See Oncology				
Surgery — general	4½	No	4	½			
Neurosurgery	5½	No	4	1½			
Orthopaedics	4½	No	2	2½			
Otorhinolaryngology	4½	No	3½	1			
Thoracic/cardiac/cardiothoracic surgery	5½	No	3	2½			
Traumatology/accident surgery	—	—	—	—	—	—	—
Urology	4½	No	2	2½			

Switzerland

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	5		4	1			
Clinical pharmacology							
Clinical physiology							
Dermatology/dermato-venereology	5		4	1			
Epidemiology/community medicine							
Forensic/legal medicine							
General practice/family practice/general medicine	5			5[a]			
Internal medicine	5		4	1			
Cardiology			2[b]				
Chest medicine/tuber-culosis			2[b]				
Neurology/neuropsychiatry	5		3	2			
Obstetrics and gynaecology	5		4	1			
Oncology							

Ophthalmology	5	4	1
Occupational health/ industrial medicine		1[b]	
Paediatrics	5	4	1
Parasitic diseases (tropical medicine)	4	3	1
Pathology			
Clinical chemistry/biochemistry			
Genetics (medical)			
Haematology		2[b]	
Immunology			
Microbiology			
Morbid anatomy (histopathology)	5	4	1
Psychiatry	5	4	1
Public health (hygiene)			
Radiodiagnosis	5	3	2
Radiotherapy	5		
Surgery — general	6	6	
Neurosurgery	6	4	2
Orthopaedics	6	3	3
Otorhinolaryngology	5	4	1
Thoracic/cardiac/cardiothoracic surgery			
Traumatology/accident surgery			
Urology	6	3	3

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Turkey[a]

Main specialty	No of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	3	No	3	—	Yes	Yes	Yes
Clinical pharmacology							
Clinical physiology							
Dermatology/dermato-venereology	3	No	2½	½	Yes	Yes	Yes
Epidemiology/community medicine	3	No	2	1	Yes	Yes	Yes
Forensic/legal medicine	2	No	2	—	Yes	Yes	Yes
General practice/family practice/general medicine							
Internal medicine	4	No	3½	½	Yes	Yes	Yes
Cardiology[b]	2	No	2	—	Yes	Yes	Yes
Chest medicine/tuber-culosis	4	No	3¼	¾	Yes	Yes	Yes
Neurology/neuropsychiatry	3	No	2¼	¾	Yes	Yes	Yes
Obstetrics and gynaecology	4	No	3¼	¾	Yes	Yes	Yes
Oncology							

Ophthalmology	3	No	3	—	Yes	Yes	Yes
Occupational health/ industrial medicine							
Paediatrics	4	No	3¾	¼	Yes	Yes	Yes
Parasitic diseases (tropical medicine) including infectious diseases	3	No	3	1	Yes	Yes	Yes
Pathology/morbid anatomy	3	No	3	—	Yes	Yes	Yes
Clinical chemistry/biochemistry	3	No	3	—	Yes	Yes	Yes
Genetics (medical)	2	No	2	—	Yes	Yes	Yes
Haematology[b]	2	No	2	—	Yes	Yes	Yes
Immunology[c]	1	No	1	—	Yes	Yes	Yes
Microbiology	3	No	3	—	Yes	Yes	Yes
Morbid anatomy (histopathology)			See Pathology				
Psychiatry	3	No	2¼	¾	Yes	Yes	Yes
Public health (hygiene)	3	No	2	1	Yes	Yes	Yes
Radiodiagnosis			Combined with Radiotherapy				
Radiotherapy/radiodiagnosis	4	No	2	2	Yes	Yes	Yes
Surgery — general	4	No	3	1	Yes	Yes	Yes
Neurosurgery	5	No	3	2	Yes	Yes	Yes
Orthopaedics/traumatology/accident surgery	4	No	3	1	Yes	Yes	Yes
Otorhinolaryngology	3	No	3	—	Yes	Yes	Yes
Thoracic/cardiac/cardiothoracic surgery	5	No	3	2	Yes	Yes	Yes
Traumatology/accident surgery			See Orthopaedics				
Urology	3	No	2½	½	Yes	Yes	Yes

Main specialty	No. of hours[a] of study required for training in this specialty	Does this include internship?	From total given in first column,[b] minimum number of hours[a] of study required in the specialty itself	Type of examination		
				Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	126	No	108	Yes		Yes
Clinical pharmacology	220	No		Yes	Yes	
Clinical physiology	396	No		Yes		Yes
Dermatology/dermato-venereology	162	No	72	Yes		Yes
Epidemiology/community medicine	124	No		Yes		Yes
Forensic/legal medicine	86	No		Yes		Yes
General practice/family practice/general medicine	1706	No		Yes	Yes	Yes
Internal medicine	1674	No	900	Yes	Yes	Yes
Cardiology						
Chest medicine (including tuberculosis)	68	No	108	Yes	Yes	Yes
Neurology/neuropsychiatry	134	No		Yes	Yes	Yes
Obstetrics and gynaecology	1174	No	972	Yes	Yes	Yes
Oncology	488	No	206	Yes	Yes	Yes

Ophthalmology	76	No		Yes	Yes	Yes
Occupational health/ industrial medicine	36	No		Yes	Yes	Yes
Paediatrics	238	No		Yes	Yes	Yes
Parasitic diseases (tropical medicine)	270	No	108	Yes	Yes	Yes
Pathology				Yes		Yes
Clinical chemistry/bio-chemistry	180	No		Yes		Yes
Genetics (medical)	48	No		Yes		Yes
Haematology (included in internal medicine)		No		Yes		Yes
Immunology	40	No		Yes		Yes
Microbiology	184	No				
Morbid anatomy (histopathology)	180	No		Yes		Yes
Psychiatry	94	No		Yes	Yes	Yes
Public health (hygiene)	160	No		Yes	Yes	Yes
Radiodiagnosis		Combined with Radiotherapy				
Radiotherapy/radiodiagnosis	210	No		Yes	Yes	Yes
Surgery — general	1506	No	900	Yes	Yes	Yes
Neurosurgery	24	No		Yes	Yes	Yes
Orthopaedics						
Otorhinolaryngology	76	No		Yes	Yes	Yes
Thoracic/cardiac/cardiothoracic surgery (included in Surgery)				Yes	Yes	Yes
Traumatology/accident surgery[c]	282	No	144	Yes	Yes	Yes
Urology	34	No	144	Yes	Yes	Yes

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	6-7	No	5	0-2	Yes	Yes	Yes
Clinical pharmacology	7	No	3	4	Yes	Yes	Yes
Clinical physiology	7	No	3	4	Yes	Yes	Yes
Dermatology/dermato-venereology	7	No	4	3	Yes	Yes	Yes
Epidemiology	6	No	3	3	Yes	Yes	No
Community medicine	6-7	No	5	1-2	Yes	Yes	No
Forensic/legal medicine	6	No	3	3	Yes	Yes	Yes
General practice/family practice/general medicine	3	No	1	2	No	No	No
Internal medicine	7	No	5	0-2	Yes	Yes	Yes
Cardiology	7	No	3	4	Yes	Yes	Yes
Chest medicine/tuber-culosis	7	No	3	4	Yes	Yes	Yes
Neurology/neuropsychiatry	7	No	4	4	Yes	Yes	Yes
Obstetrics and gynaecology	6-7	No	5	1-2	Yes	Yes	Yes
Oncology	7	No	4	3	Yes	Yes	Yes

Ophthalmology	6-7	No	4	2-3	Yes	Yes	Yes
Occupational health/ industrial medicine	7	No	4	3	Yes	Yes	Yes
Paediatrics	7	No	4	3	Yes	Yes	Yes
Parasitic diseases (tropical medicine)	7	No	4	3	Yes	Yes	Yes
Pathology	6-7	No	5	1-2	Yes	Yes	Yes
Clinical chemistry/bio-chemistry	6-7	No	5	1-2	Yes	Yes	Yes
Genetics (medical)	6-7	No	5	1-2	Yes	Yes	Yes
Haematology	6-7	No	5	1-2	Yes	Yes	Yes
Immunology	6-7	No	5	1-2	Yes	Yes	Yes
Microbiology	6-7	No	5	1-2	Yes	Yes	Yes
Morbid anatomy (histopathology)	6-7	No	5	1-2	Yes	Yes	Yes
Psychiatry	6-7	No	5	1-2	Yes	Yes	Yes
Radiodiagnosis	6-7	No	5	1-2	Yes	Yes	Yes
Radiotherapy	6-7	No	5	1-2	Yes	Yes	Yes
Surgery — general	6-7	No	4	2-3	Yes	Yes	Yes
Neurosurgery	8	No	5	3	Yes	Yes	Yes
Orthopaedics	6-7	No	4	2-3	Yes	Yes	Yes
Otorhinolaryngology	6	No	3	2-3	Yes	Yes	Yes
Thoracic/cardiac/cardiothoracic surgery	7	No	4	3	Yes	Yes	Yes
Traumatology/accident surgery	7	No	4	3	Yes	Yes	Yes
Urology	6	No	3	3	Yes	Yes	Yes

Yugoslavia

Main specialty	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (months)[a]	Training required in other fields (months)[a]	Oral	Written	Practical/ clinical
Anaesthetics (with reanimation and/or intensive care)	3-4	No	18	14 -24	Yes	No	Yes
Clinical pharmacology	4	No	20	28	Yes	No	Yes
Clinical physiology[b]							
Dermatology/dermato-venereology	3-4	No	22	9 -14	Yes	No	Yes
Epidemiology/community medicine	3	No	17½	12 -18½	Yes	Yes	Yes
Forensic/legal medicine	3-4	No	23	3 -24	Yes	No	Yes
General practice/family practice/general medicine	3	No	16	20 -24	Yes	No	Yes
Internal medicine	4	No	23	24 -25	Yes	No	Yes
Cardiology[c]	1-2	No	12-24		Yes	No	Yes
Chest medicine/tuber-culosis	4	No	22	16 -26	Yes	No	Yes
Neurology/neuropsychiatry	3-4	No	28	6 -12	Yes	No	Yes
Obstetrics and gynaecology	4	No	24	12 -24	Yes	No	Yes
Oncology	See Radiotherapy						

Ophthalmology	3-4	No	27	2 - 9	Yes	No	Yes
Occupational health/ industrial medicine	3-4	No	27	4 -11	Yes	Yes	Yes
Paediatrics	4	No	25	4 -23	Yes	No	Yes
Parasitic diseases (tropical medicine)			See Microbiology				
Pathology	3-4	No	25	3 -11	Yes	No	Yes
Clinical chemistry/bio-chemistry	3-4	No	24	7 -24	Yes	No	Yes
Genetics (medical)[b]							
Haematology	1-2	No	12-24	—	Yes	No	Yes
Immunology[b]							
Microbiology (including Parasitic diseases)	3	No	29	5 - 7	Yes	No	Yes
Morbid anatomy (histopathology)	4	No	35	13	Yes	No	Yes
Psychiatry			See Neurology				
Public health (hygiene)	3	No	20	12 -16	Yes	Yes	Yes
Radiodiagnosis	3-4	No	31	5 - 7	Yes	No	Yes
Radiotherapy (including Oncology)	3-4	No	30	6 - 8	Yes	No	Yes
Surgery — general	4	No	25	15 -23	Yes	No	Yes
Neurosurgery	3-5	No	24	18 -24	Yes	No	Yes
Orthopaedics (including Traumatology)	3-4	No	[illegible]	15½-27	Yes	No	Yes
Otorhinolaryngology	4	No	35	10 -13	Yes	No	Yes
Thoracic/cardiac/cardiothoracic surgery	4	No	26	22	Yes	No	Yes
Traumatology/accident surgery			See Orthopaedics				
Urology	4	No	26	20 -22	Yes	No	Yes

FOOTNOTES TO TABLE 2

Austria

[a] Medicochemical laboratory diagnosis.

[b] Microbiological–serological laboratory diagnosis.

[c] Histology.

Belgium

[a] There are special requirements for the training of general practitioners (details available).

[b] Under review.

[c] Training in industrial medicine and tropical medicine does not confer medical specialty recognition by the Ministry of Public Health and Family Affairs. For industrial medicine a one- to two-year course leads to a degree. For tropical medicine there is a five-month degree course in the Prince Leopold Institute, Antwerp.

[d] Training in these specialties consists of a basic two years (histopathology, clinical chemistry, microbiology and haematology: six months each), and three years' higher training. For clinical chemistry, microbiology and haematology this must include a minimum of one year in the subject. The criteria for morbid anatomy are under consideration.

[e] Training in thoracic surgery (and also in vascular surgery and abdominal surgery) occupies five years. The surgical specialties have been regrouped: surgery, neurosurgery, plastic surgery, urology and orthopaedics. Specialization in other surgical disciplines is by certificate, after spending the last two years of the six years of surgical training in the special field.

Czechoslovakia

[a] Problems arise with the interpretation of data concerning the system in Czechoslovakia, because of the existence of two grades of specialization in some specialties, and the relationship of these to the respective subspecialties. For the present table, detail of this kind has been omitted, and this should be borne in mind when comparing this table with those in previous reports. The total number of years required for full training in any specialty remains unchanged.

Finland

[a] Subspecialty of internal medicine.

[b] Main specialty.

[c] Subspecialty of internal medicine and paediatrics.

[d] Subspecialty of clinical microbiology.

[e] Subspecialty of surgery.

France

[a] The term "internat", in France, describes a form of training entirely distinct from the "internship" as understood in other countries. See original report: **Parthouse, J.** *Graduate medical education in the European Region*: report on a Capacity Study. Copenhagen, WHO Regional Office for Europe, 1974 (unpublished document EURO 6301(1)).

German Democratic Republic

[a] Subspecialty.

Greece

[a] Internship can be included in specialist training.

[b] Details supplied.

[c] Two months' internal medicine, one month's otorhinolaryngology, three months' paediatrics.

[d] Fifteen months' radiotherapy, six months' radiology.

[e] Trainees must be graduates in radiology.

Hungary

[a] Note that totals are given in months not years.

Iceland

[a] Academic year.

Italy

[a] The 1982 reform of medical specialties, in accordance with European Community policy, is intended to achieve a uniform duration of courses for specialization throughout Italy.

Luxembourg

[a] Internal medicine.

Norway

[a] Work in hospital departments plus 300 hours of courses.

[b] There are five subspecialties of general medicine, in which two years' training in the subspecialty may be included in the period of training in the main specialty.

[c] Includes pneumology.

[d] Includes infectious and contagious diseases.

[e] Two years of infectious diseases and one year of microbiology. These three years may be included in the training period of internal medicine.

[f] Including six months' radiotherapy.

[g] There are five subspecialties of surgery, for which the requirement is training in surgery plus three years in the subspecialty; one of the three years in the subspecialty may be included in the main specialty training.

[h] Including six months' neuro gy/neurosurgery.

Poland

[a] In Poland, two degrees of specialization are recognized, and the appropriate lengths of training are indicated in the table. First degree (I°) specialization is available in 30 specialties, second degree (II°) in 55 specialties. There are 25 subspecialties, in which training takes place after preparation in the main specialties.

[b] The period of expected specialist training in each case may be shortened by a third.

[c] The trainee's supervisor decides which other disciplines are required.

[d] I° specialization is in anaesthetics, internal medicine, paediatrics or neurology.

[e] I° may be in different specialties.

[f] One of the 25 subspecialties.

[g] Subspecialty, after specialization in internal medicine or paediatrics.

[h] There are three different specialties: oncological surgery (two years' training), radiotherapy (three years' training), oncological pathology (one year's training).

[i] Subspecialty, after specialization in internal medicine or infectious diseases.

[j] Subspecialty, after specialization in internal medicine or industrial medicine.

[k] Subspecialty, after II° specialization in surgery.

Portugal

[a] In Portugal medical specialties can be awarded by two different mechanisms: (1) specialty training through a specialized medical department and final examination in a public hospital; or (2) examination by a jury from the Portuguese Medical Association, after submitting an acceptable curriculum.

Spain

[a] To be determined.

Sweden

[a] There are six courses with different types of examination.

[b] There is a separate specialty of gynaecological oncology requiring five years' training (minimum of two years in specialty itself).

Switzerland

[a] One year of surgery, one year of general medicine and three years of choice in other disciplines.

[b] In addition to general medicine.

Turkey

[a] Information based on reply from Ankara. Replies were also received from Hacettepe, Cerrahpaşa-Istanbul, Çukurova-Adana, Eskişehir and Bursa.

[b] Following specialization in internal medicine.

[c] Following specialization in microbiology.

Union of Soviet Socialist Republics

[a] Note that totals are given in hours not years.

[b] Within the specialty there is an additional five months of required training called *subordinatura*.

[c] Includes orthopaedics.

Yugoslavia

[a] The minimum training required in the specialty itself and the training requirement in other fields vary in the different republics. A range is therefore given in months.

[b] These subjects are not regarded as specialties in the field of medicine, although postgraduate training is available.

[c] Subspecialty of internal medicine.

TABLE 3

TRAINING REQUIREMENTS
IN INDIVIDUAL SPECIALTIES

Anaesthetics with reanimation and/or intensive care

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	3	No	3				
Austria	6	Yes	3	3	No	No	No
Belgium	4	No	4		No	No	No
Bulgaria	3	No	2¼	¼	Yes		Yes
Czechoslovakia	6	No	5½	½	Yes	Yes	Yes
Denmark	4	No	4	0	No	No	No
Finland	6	No	4	2	No	Yes	No
France	3	No	3		No	Yes	No
German Democratic Republic	4-5	No	3½	½-1½	Yes	No	No
Germany, Federal Republic of	4	Yes	3½	½	Yes	No	No
Greece	3	*	2	1	Yes	No	Yes

Hungary	4		3½	½	Yes	No	Yes
Iceland	4½	No	3	1½	No	No	No
Ireland	6	No	—	—	Yes	Yes	Yes
Italy	3	No	3		No	No	Yes
Luxembourg	4	No	4				
Netherlands	3½	No	3	½	No	No	No
Norway	5	No	4	1	No	No	No
Poland	I°2/II°2	No	4		Yes	Yes	Yes
Portugal	4	No	4		Yes	Yes	Yes
Spain	4	No	2	2		To be determined	
Sweden	4	No	3	1		[b]	
Switzerland	5		4	1			
Turkey	3	No	3	—	Yes	Yes	Yes
United Kingdom	6-7	No	5	0-2	Yes	Yes	Yes
USSR	126[c]	No	108[c]		Yes		Yes
Yugoslavia	3-4	No	18[d]	14-24[d]	Yes	No	Yes

Clinical pharmacology

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	–			–			
Austria							
Belgium							
Bulgaria	3	No	3		Yes		Yes
Czechoslovakia	6	No	3	3	Yes	Yes	Yes
Denmark	–						
Finland	6	No	3	3	No	Yes	No
France							
German Democratic Republic[d]	2	No	2	–	No	No	No
Germany, Federal Republic of	5	Yes	4	1	Yes	No	No
Greece	–			–			

Hungary	2		2	–	Yes	No	Yes
Iceland	4-4½	No			No	No	No
Ireland	7	No	–	–	Yes	Yes	Yes
Italy	3-4[b]		3				
Luxembourg							
Netherlands							
Norway							
Poland[c]	5	No	3	2	Yes		Yes
Portugal	4	No	4		Yes	Yes	Yes
Spain	3	No	3			To be determined	
Sweden	–	–	–	–	–	–	–
Switzerland							
Turkey							
United Kingdom	7	No	3	4	Yes	Yes	Yes
USSR	220[d]	No			Yes	Yes	
Yugoslavia	4	No	20[e]	28[e]	Yes	No	Yes

Clinical physiology

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria							
Austria							
Belgium							
Bulgaria	3	No	3	—	Yes	—	Yes
Czechoslovakia	—	—	—	—	—	—	—
Denmark	4	No	3	1	No	No	No
Finland	6	No	4	2	No	Yes	No
France							
German Democratic Republic	4-5	No	4	—	Yes	No	No
Germany, Federal Republic of							
Greece							

Hungary	—		—	—	—	—	—
Iceland	4	No			No	No	No
Ireland	—						
Italy							
Luxembourg							
Netherlands							
Norway	4	No	4		No	No	No
Poland	I°1½/II°3	No	4½		Yes		Yes
Portugal	4	No	4		Yes	Yes	Yes
Spain	—	—	—	—		To be determined	
Sweden	4½	No	4	½	[a]		
Switzerland							
Turkey							
United Kingdom	7	No	3	4	Yes	Yes	Yes
USSR	396[b]	No			Yes		Yes
Yugoslavia	[c]						

Dermatology/dermatovenereology

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	3	No	3	—		Yes	Yes
Austria	6	Yes	4	2	No	No	No
Belgium (dermato-venereology only)	4	No	4		No	No	No
Bulgaria	3	No	3	—	Yes	—	Yes
Czechoslovakia	6	No	5½	½	Yes	Yes	Yes
Denmark	4	No	3	1	No	No	No
Finland	6	No	4	2	No	Yes	No
France	3	No	3	—	No	Yes	Yes
German Democratic Republic	4-5	No	4	—	Yes	No	No
Germany, Federal Republic of	4	Yes	4	—	Yes	No	No
Greece	3	No	—	—	Yes	No	Yes

Hungary	4		4	—	Yes	No	Yes
Iceland	4½	No	3	1½	No	No	No
Ireland	7	No	—	—	Yes	Yes	Yes
Italy	3	No	3		Yes	No	Yes
Luxembourg	3	No	3				
Netherlands	4	—	—	—	No	No	No
Norway	4	No	3	1	No	No	No
Poland	I°2/II°2½	No	4½		Yes	Yes	Yes
Portugal	4	No	4		Yes	Yes	Yes
Spain	4	No	3	1		To be determined	
Sweden	4	No	3	1	[a]		
Switzerland	5		4	1			
Turkey	3	No	2½	½	Yes	Yes	Yes
United Kingdom	7	No	4	3	Yes	Yes	Yes
USSR	162[b]	No	72[b]		Yes		Yes
Yugoslavia	3-4	No	22[c]	9-14[c]	Yes	No	Yes

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Epidemiology/community medicine

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	3	No	3	—	—	Yes	Yes
Austria							
Belgium							
Bulgaria	3	No	3	—	Yes	—	Yes
Czechoslovakia	6	No	3	3	Yes	Yes	Yes
Denmark	—	—	—	—	—	—	—
Finland					No	Yes	No
France							
German Democratic Republic	4-5	No	3½	½	Yes	No	No
Germany, Federal Republic of							
Greece	—	—	—	—	—	—	—

Hungary	4		3¾	¼	Yes	No	Yes
Iceland	4½	No	1[a]	4	Yes	Yes	Yes
Ireland	6	No	—	—	Yes	Yes	Yes
Italy	4	No			Yes	No	Yes
Luxembourg							
Netherlands							
Norway			In process of planning				
Poland[b]		No	II°3		Yes		Yes
Portugal	4	No	4		Yes	Yes	Yes
Spain	3	No	2	1		To be determined	
Sweden (social medicine)	4½	No	2	1½	[c]		
Switzerland							
Turkey	3	No	2	1	Yes	Yes	Yes
United Kingdom (epidemiology only)	6	No	3	3	Yes	Yes	No
USSR	124[d]	No			Yes		Yes
Yugoslavia	3	No	17½[e]	12-18[e]	Yes	Yes	Yes

Forensic/legal medicine

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	3	No	3	—		Yes	Yes
Austria	6	Yes	4	2	No	No	No
Belgium							
Bulgaria	3	No	3	—	Yes	—	Yes
Czechoslovakia	6	No	3	3	Yes	Yes	Yes
Denmark	—	—	—	—	—	—	—
Finland	6	No	3	3	No	Yes	No
France	1	No	1	—	No	Yes	Yes
German Democratic Republic	4-5	No	3	1	Yes	No	No
Germany, Federal Republic of	5	Yes	4½	½	Yes	No	No
Greece	3	No	1[a]	2[a]	Yes	No	Yes

Hungary	4		34½[b]	13½[b]	Yes	No	Yes
Iceland	4-4½	No			No	No	No
Ireland	—						
Italy	3	No			Yes	No	No
Luxembourg							
Netherlands							
Norway							
Poland	5	No	3	2	Yes		Yes
Portugal	4	No	4		Yes	Yes	Yes
Spain	—	—	—	—		To be determined	
Sweden	4½	No	1½	3	[c]		
Switzerland							
Turkey	2	No	2	—	Yes	Yes	Yes
United Kingdom	6	No	3	3	Yes	Yes	Yes
USSR	86[d]	No			Yes		Yes
Yugoslavia	3-4	No	23[b]	3-24[b]	Yes	No	Yes

General practice/family practice/general medicine

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	Integrated with social medicine (see Epidemiology/community medicine)						
Austria (general practice only)	3	Yes	3		No	No	No
Belgium (general practice only)	2[a]	No	2				
Bulgaria	—	—	—	—	—	—	—
Czechoslovakia	6	No	4½	1½	Yes	Yes	Yes
Denmark							
Finland	6	No	3	3	No	Yes	No
France							
German Democratic Republic	4-5	No	2½	1½	Yes	No	No
Germany, Federal Republic of	4	Yes	—	2½	Yes	No	No
Greece	1½	No	1	½[b]	Yes	No	Yes

Hungary	5		49[c]	11[c]	Yes	No	Yes
Iceland	4½	No	1	3½	No	No	No
Ireland	3	No	—	—	Yes	Yes	Yes
Italy	—	—	—		—	—	—
Luxembourg			Not regarded as a specialty				
Netherlands	1						
Norway	3	No	2	1[d]	No	No	No
Poland	I°2½/II°3	No	5½		Yes		Yes
Portugal	3	No	3		Yes	Yes	Yes
Spain	3	No	3			To be determined	
Sweden	4	No	½	3½	[e]		
Switzerland	5			5[f]			
Turkey							
United Kingdom	3	No	1	2	No	No	No
USSR	1706[g]	No			Yes	Yes	Yes
Yugoslavia	3	No	16[c]	20-24[c]	Yes	No	Yes

Internal medicine

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	4	No	2	2	—	Yes	Yes
Austria	6	Yes	5	1	No	No	No
Belgium	5	No	5		No	No	No
Bulgaria	4	No	4	—	Yes	—	Yes
Czechoslovakia	6	No	5½	½	Yes	Yes	Yes
Denmark	4½	No	3½	1	No	No	No
Finland	6	No	5	1	No	Yes	No
France	4	Yes[a]	4	—	No	Yes	Yes
German Democratic Republic	4-5	No	3½	½	Yes	No	No
Germany, Federal Republic of	6	Yes	5½	½	Yes	No	No
Greece	3	No			Yes	No	Yes

Hungary	5		50½[b]	9½[b]	Yes	No	Yes
Iceland (general)	4½	No	3½	1	No	No	No
Ireland	7	No	—	—	Yes	Yes	Yes
Italy	5	No	3		Yes	No	Yes
Luxembourg	5	No	5				
Netherlands	5	No	5	0	No	No	No
Norway	6	No	5	1	No	No	No
Poland	I°2/II°3	No	5		Yes		Yes
Portugal	5	No	5		Yes	Yes	Yes
Spain	4	No	4			To be determined	
Sweden	4½	No	4	½	[c]		
Switzerland	5		4	1			
Turkey	4	No	3½	½	Yes	Yes	Yes
United Kingdom	7	No	5	0-2	Yes	Yes	Yes
USSR	1674[d]	No	900[d]		Yes	Yes	Yes
Yugoslavia	4	No	23[b]	24-25[b]	Yes	No	Yes

Cardiology

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	3	No	3	—	—	Yes	Yes
Austria							
Belgium	5	No	5		No	No	No
Bulgaria	1½	No	1½	—	Yes	—	Yes
Czechoslovakia	6	No	3	3	Yes	Yes	Yes
Denmark	4½	No	3	1½	No	No	No
Finland[a]	2	No	2	—	No	Yes	No
France	3	No	3	—	No	Yes	Yes
German Democratic Republic	2	No	2	—	No	No	No
Germany, Federal Republic of	6	Yes			Yes	No	No
Greece	4	No	1	3	Yes	No	Yes

Hungary	2		2	—	Yes	No	Yes
Iceland	4½	No	2	2½	No	No	No
Ireland	7	No	—	—	Yes	Yes	Yes
Italy	3-4[b]	No	3		Yes	No	Yes
Luxembourg	4	No	4				
Netherlands	5	Yes	3	1-2	No	No	No
Norway	6	No	2[c]	4	No	No	No
Poland[d]	5	No	3	5-5½	Yes		Yes
Portugal	5	No	5		Yes	Yes	Yes
Spain	5	No	4	1		To be determined	
Sweden	4½	No	2	2½	[e]		
Switzerland			2[f]				
Turkey[g]	2	No	2	—	Yes	Yes	Yes
United Kingdom	7	No	3	4	Yes	Yes	Yes
USSR							
Yugoslavia[g]	1-2	No	12-24[h]		Yes	No	Yes

Chest medicine/tuberculosis

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	3	No	3	—	—	Yes	Yes
Austria	6	Yes	4	2	No	No	No
Belgium (chest medicine only)	5	No	5		No	No	No
Bulgaria	4	No	38[a]	10[a]	Yes	—	Yes
Czechoslovakia	6	No	3	3	Yes	Yes	Yes
Denmark	4½	No	3½	1½	No	No	No
Finland	6	No	3	3	No	Yes	No
France	3	No	3	—	No	Yes	Yes
German Democratic Republic	2	No	2	—	No	No	No
Germany, Federal Republic of	6	Yes			Yes	No	No
Greece	3	No	2	1	Yes	No	Yes

Hungary	2		2	—	Yes	No	Yes
Iceland	4½	No	2	2½	No	No	No
Ireland	7	No	—	—	Yes	Yes	Yes
Italy	3-4[b]	No	3		Yes	No	Yes
Luxembourg	5	No	5				
Netherlands	5	Yes	3	2	No	No	No
Norway (includes pneumology)	5½	No	3[c]	2½	No	No	No
Poland	5	No	3	2	Yes		Yes
Portugal	4	No	4		Yes	Yes	Yes
Spain	3	No	3			To be determined	
Sweden	4½	No	2	2½	[d]		
Switzerland			2[e]				
Turkey	4	No	3¼	¾	Yes	Yes	Yes
United Kingdom	7	No	3	4	Yes	Yes	Yes
USSR[f]	68[g]	No	108[g]		Yes	Yes	Yes
Yugoslavia	4	No	22[e]	16-26[e]	Yes	No	Yes

Neurology/neuropsychiatry

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	3	No	3	—	—	Yes	Yes
Austria (neurology only)	6	Yes	5	1	No	No	No
Belgium (neuro-psychiatry only)	5	No	5		No	No	No
Bulgaria	3	No	3	—	Yes	—	Yes
Czechoslovakia	6	No	5½	½	Yes	Yes	Yes
Denmark	5	No	3	2	No	No	No
Finland	6	No	4	2	No	Yes	No
France	3	No	3	—	No	Yes	Yes
German Democratic Republic	4-5	No	4	—	Yes	No	No
Germany, Federal Republic of							
neurology	4	Yes	3	1	Yes	No	No
neuropsychiatry	5	Yes	4	1	Yes	No	No
Greece	3	No	2	1	Yes	No	Yes

Hungary	4		41½[e]	6½[e]	Yes	No	Yes
Iceland	4½	No	2	2½	No	No	No
Ireland	7	No	—	—	Yes	Yes	Yes
Italy	4	No	3		Yes	No	Yes
Luxembourg	4	No	4				
Netherlands	4	No	3	1	No	No	No
Norway	5	No	3½	1½	No	No	No
Poland	I°2/II°3	No	5		Yes	Yes	Yes
Portugal	5	No	5		Yes	Yes	Yes
Spain (neurology only)	4	No	3			To be determined	
Sweden	4	No	3	1	[b]		
Switzerland	5		3	2			
Turkey	3	No	2¼	¾	Yes	Yes	Yes
United Kingdom	7	No	4	4	Yes	Yes	Yes
USSR	134[c]	No			Yes	Yes	Yes
Yugoslavia	3-4	No	20[e]	6-12[e]	Yes	No	Yes

Obstetrics and gynaecology

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	4	No	4	—	—	Yes	Yes
Austria	6	Yes	4	2	No	No	No
Belgium	5	No	5		No	No	No
Bulgaria	4	No	4	—	Yes	—	Yes
Czechoslovakia	7	No	6	1	Yes	Yes	Yes
Denmark	4½	No	3	1½	No	No	No
Finland	6	No	4	2	No	Yes	No
France	4	Yes[a]	3	—	No	Yes	Yes
German Democratic Republic	4-5	No	4	—	Yes	No	No
Germany, Federal Republic of	5	Yes	4½	½	Yes	No	No
Greece	4	No	3	1	Yes	No	Yes

Hungary	4		41½[b]	6½[b]	Yes	No	Yes
Iceland	4½	No	2½	2	No	No	No
Ireland	7	No	—	—	Yes	Yes	Yes
Italy	4	No	3		Yes	No	Yes
Luxembourg	4	No	4				
Netherlands	5	No	5	0	No	No	No
Norway	5½	No	4	1½	No	No	No
Poland	I*2½/II*3	No	5½		Yes	Yes	Yes
Portugal	5	No	5		Yes	Yes	Yes
Spain	4	No	4		To be determined		
Sweden	4½	No	3	1½	[c]		
Switzerland	5		4	1			
Turkey	4	No	3¼	¾	Yes	Yes	Yes
United Kingdom	6-7	No	5	1-2	Yes	Yes	Yes
USSR	1174[d]	No	972[d]		Yes	Yes	Yes
Yugoslavia	4	No	24[b]	12-24[b]	Yes	No	Yes

Oncology

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	–	–	–	–	–	–	–
Austria							
Belgium							
Bulgaria	–	–	–	–	–	–	–
Czechoslovakia	6	No	3	3	Yes	Yes	Yes
Denmark	–	–	–	–	No	No	No
Finland			See Radiotherapy				
France							
German Democratic Republic	–	–	–	–	–	–	–
Germany, Federal Republic of	–	–	–	–	–	–	–
Greece	–	–	–	–	–	–	–

Hungary	2		1½	½	Yes	No	Yes
Iceland	4½	No	2	2½	No	No	No
Ireland	7	No	—	—	Yes	Yes	Yes
Italy	3	No			—	—	—
Luxembourg							
Netherlands							
Norway			See Radiotherapy				
Poland[a]							
Portugal	4	No	4		Yes	Yes	Yes
Spain	4	No	2	2		To be determined	
Sweden							
general	4½	No	3	1½	[c]		
gynaecological[b]	5	No	2	3	[c]		
Switzerland							
Turkey							
United Kingdom	7	No	4	3	Yes	Yes	Yes
USSR	488[d]	No	206[d]		Yes	Yes	Yes
Yugoslavia			See Radiotherapy				

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Ophthalmology

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	3	No	3	—	—	Yes	Yes
Austria	6	Yes	5	1	No	No	No
Belgium	3[a]	No	3[a]		No	No	No
Bulgaria	3	No	3	—	Yes	—	Yes
Czechoslovakia	7	No	6	1	Yes	Yes	Yes
Denmark	4	No	3	1	No	No	No
Finland	6	No	4	2	No	Yes	No
France	3	No	3	—	No	Yes	Yes
German Democratic Republic	4-5	No	4	—	Yes	No	No
Germany, Federal Republic of	4	Yes	—	—	Yes	No	No
Greece	3	No	2¼	¾[b]	Yes	No	Yes

Hungary	4		4	—	Yes	No	Yes
Iceland	4	No	3	1	No	No	No
Ireland	7	No	—	—	Yes	Yes	Yes
Italy	4	No	3		Yes	No	Yes
Luxembourg	4	No	4				
Netherlands	4	No	4	0	No	No	No
Norway	4½	No	3	1½	No	No	No
Poland	I°1½,°II°3	No	4½		Yes	Yes	Yes
Portugal	4	No	4		Yes	Yes	Yes
Spain	4	No	4			To be determined	
Sweden	4	No	3½	½	[c]		
Switzerland	5		4	1			
Turkey	3	No	3	—	Yes	Yes	Yes
United Kingdom	6-7	No	4	2-3	Yes	Yes	Yes
USSR	76[d]	No			Yes	Yes	Yes
Yugoslavia	3-4	No	27[e]	2-9[e]	Yes	No	Yes

Occupational health/industrial medicine

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	See Epidemiology/community medicine						
Austria							
Belgium (industrial medicine only)	*						
Bulgaria	3	No	2¾	¼	Yes	—	Yes
Czechoslovakia	6	No	3	3	Yes	Yes	Yes
Denmark	—	—	—	—	No	No	No
Finland	6	No	3	3	No	Yes	No
France	2	No	2	—	No	Yes	Yes
German Democratic Republic	4-5	No	3	1	Yes	No	No
Germany, Federal Republic of	4	Yes	—	—	Yes	No	No
Greece	—	—	—	—	—	—	—

Hungary	4		38[b]	10[b]	Yes	No	Yes
Iceland							
Ireland	6	No	—	—	Yes	Yes	Yes
Italy	4	No	3		Yes	No	Yes
Luxembourg							
Netherlands							
Norway	5	No	3	2	No	No	No
Poland	I°2/II°3	No	5		Yes		Yes
Portugal	3	No	3		Yes	Yes	Yes
Spain							
Sweden	4½	No	2	2½	[c]		
Switzerland			1[d]				
Turkey							
United Kingdom	7	No	4	3	Yes	Yes	Yes
USSR	36[e]	No			Yes	Yes	Yes
Yugoslavia	3-4	No	27[b]	4-11[b]	Yes	Yes	Yes

Paediatrics

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	4	No	4	—	—	Yes	Yes
Austria	6	Yes	4	2	No	No	No
Belgium	5	No	5		No	No	No
Bulgaria	4	No	4	—	Yes	—	Yes
Czechoslovakia	6	No	5½	½	Yes	Yes	Yes
Denmark	4	No	3	1	No	No	No
Finland	6	No	4	2	No	Yes	No
France	3	No	3	—	No	Yes	Yes
German Democratic Republic	4-5	No	4	—	Yes	No	No
Germany, Federal Republic of	5	Yes	4½	½	Yes	No	No
Greece	3	[a]	2	1	Yes	No	Yes

Hungary	4		4+1½[b]	6½[b]	Yes	No	Yes
Iceland	4½	No	3	1½	No	No	No
Ireland	7	No	—	—	Yes	Yes	Yes
Italy	4	No	3		Yes	No	Yes
Luxembourg	4	No	4				
Netherlands	4	No	4	0	No	No	No
Norway	5	No	4	1	No	No	No
Poland	I°2½/II°3	No	5½		Yes	Yes	Yes
Portugal	5	No	5		Yes	Yes	Yes
Spain	4	No	4			To be determined	
Sweden	4	No	3	1	[c]		
Switzerland	5		4	1			
Turkey	4	No	3¾	¼	Yes	Yes	Yes
United Kingdom	7	No	4	3	Yes	Yes	Yes
USSR	238[d]	No			Yes	Yes	Yes
Yugoslavia	4	No	25[b]	4-23[b]	Yes	No	Yes

Parasitic diseases (tropical medicine)

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria (including communicable diseases)	3	No	3	—	—	Yes	Yes
Austria							
Belgium (tropical medicine only)	[a]						
Bulgaria	3	No	2⅓	⅔	Yes	—	Yes
Czechoslovakia	—	—	—	—	—	—	—
Denmark	4½	No	3½	1	No	No	No
Finland (infectious diseases only)[b]	2	No	2	—	No	Yes	No
France	1	No	1	—	No	Yes	Yes
German Democratic Republic	—	—	—	—	—	—	—
Germany, Federal Republic of							
Greece	—	—	—	—	—	—	—

Hungary	2		2	—	Yes	No	Yes
Iceland							
Ireland							
Italy	3	No	3		Yes	No	Yes
Luxembourg							
Netherlands							
Norway (including infectious and contagious diseases)	6	No	3[c]	3	No	No	No
Poland (tropical medicine only)[d]	5	No	2	5	Yes		Yes
Portugal							
Spain							
Sweden (infectious diseases only)	4½	No	3	1½	[e]		
Switzerland	4		3	1			
Turkey (including infectious diseases)	3	No	3	1	Yes	Yes	Yes
United Kingdom	7	No	4	3	Yes	Yes	Yes
USSR	270[f]	No	108[f]		Yes	Yes	Yes
Yugoslavia			See Microbiology				

Pathology

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	—	—	—	—	—	—	—
Austria	6	Yes	4	2	No	No	No
Belgium							
Bulgaria	—	—	—	—	—	—	—
Czechoslovakia	—	—	—	—	—	—	—
Denmark							
Finland	6	No	4	2	No	Yes	No
France							
German Democratic Republic[a]	4-5	No	3	1	Yes	No	No
Germany, Federal Republic of	5	Yes	4	1	Yes	No	No
Greece	4	[b]	4	—	Yes	No	Yes

Hungary	4		3½	½	Yes	No	Yes
Iceland	4	No	3	1	No	No	No
Ireland	6	No	—	—	Yes	Yes	Yes
Italy	4	No	3		Yes	No	Yes
Luxembourg							
Netherlands							
Norway	5	No	4	1	No	No	No
Poland[c]	5	No	2	5	Yes		Yes
Portugal	4	No	4		Yes	Yes	Yes
Spain (histopathology)	4	No	4			To be determined	
Sweden	4½	No	4	½	[d]		
Switzerland							
Turkey (morbid anatomy)	3	No	3	—	Yes	Yes	Yes
United Kingdom	6-7	No	5	1-2	Yes	Yes	Yes
USSR							
Yugoslavia	3-4	No	25[e]	3-11[e]	Yes	No	Yes

Clinical chemistry/biochemistry

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	3	No	3	—	—	Yes	Yes
Austria[a]	6	Yes	4	2	No	No	No
Belgium[b]	5		1½	1½-3½	No	No	No
Bulgaria	3	No	3	—	Yes	—	Yes
Czechoslovakia	6	No	5½	½	Yes	Yes	Yes
Denmark	4	No	3	1	No	No	No
Finland (main specialty)	6	No	3	3	No	Yes	No
France							
German Democratic Republic	4-5	No	4	—	Yes	No	No
Germany, Federal Republic of							
Greece	5	[c]	5		No	No	No

Hungary	—	—	—	—	—	—	—
Iceland	4	No	3	1	No	No	No
Ireland	6	No	—	—	Yes	Yes	Yes
Italy	3	No	3		Yes	No	Yes
Luxembourg	4	No	4				
Netherlands							
Norway	5	No	3	2	No	No	No
Poland							
Portugal							
Spain	3	No	3			To be determined	
Sweden	4½	No	4	½	[d]		
Switzerland							
Turkey	3	No	3	—	Yes	Yes	Yes
United Kingdom	6-7	No	5	1-2	Yes	Yes	Yes
USSR	180[e]	No			Yes		Yes
Yugoslavia	3-4	No	24[f]	7-24[f]	Yes	No	Yes

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Genetics (medical)

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	–	–	–	–	–	–	–
Austria							
Belgium							
Bulgaria	3	No	3		Yes	–	Yes
Czechoslovakia	6	No	3	3	Yes	Yes	Yes
Denmark							
Finland							
France							
German Democratic Republic	–	–	–	–	–	–	–
Germany, Federal Republic of							
Greece	–	–	–	–	–	–	–

Hungary	—	—	—	—	—	—	—
Iceland	4	No			No	No	No
Ireland							
Italy	3	No	3		Yes	No	Yes
Luxembourg							
Netherlands							
Norway	5	No	4	1	No	No	No
Poland							
Portugal							
Spain							
Sweden	—	—	—	—	—	—	—
Switzerland							
Turkey	2	No	2	—	Yes	Yes	Yes
United Kingdom	6-7	No	5	1-2	Yes	Yes	Yes
USSR	48[a]	No			Yes		Yes
Yugoslavia[b]							

Haematology

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	3	No	3	—	—	Yes	Yes
Austria	8	Yes	4	2	No	No	No
Belgium[a]	5		1½	1½-3½	No	No	No
Bulgaria	1½	No	1½	—	Yes	—	Yes
Czechoslovakia	6	No	3	3	Yes	Yes	Yes
Denmark							
Finland[b]	2	No	2	—	No	Yes	No
France	1	No	1	—	No	Yes	Yes
German Democratic Republic	—	—	—	—	—	—	—
Germany, Federal Republic of[c]	6	Yes			Yes	No	No
Greece	5	No	2	3	Yes	No	Yes

Hungary	2	—	2	—	Yes	No	Yes
Iceland	4	No	3	1	No	No	No
Ireland	6	No	—	—	Yes	Yes	Yes
Italy	3	No	3		Yes	No	Yes
Luxembourg	7		3	4[d]			
Netherlands							
Norway							
Poland[e]	5	No	2	5	Yes		Yes
Portugal	4		4		Yes	Yes	Yes
Spain	4	No	2½	1½		To be determined	
Sweden	—	—	—	—	—	—	—
Switzerland			2[f]				
Turkey[g]	2	No	2	—	Yes	Yes	Yes
United Kingdom	6-7	No	5	1-2	Yes	Yes	Yes
USSR (included in internal medicine)		No			Yes		Yes
Yugoslavia	1-2	No	12-24[h]	—	Yes	No	Yes

Immunology

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria							
Austria							
Belgium							
Bulgaria	—	—	—	—	—	—	—
Czechoslovakia	6	No	3	3	Yes	Yes	Yes
Denmark							
Finland[a]	2	No	2	—	No	Yes	No
France	1	No	1	—	No	Yes	Yes
German Democratic Republic	—	—	—	—	—	—	—
Germany, Federal Republic of							
Greece	—	—	—	—	—	—	—

Hungary	—	—	—	—	—	—	—
Iceland	4	No	3	1	No	No	No
Ireland	7	No	—	—	Yes	Yes	Yes
Italy	3	No	3				
Luxembourg							
Netherlands							
Norway	5	No	4	1	No	No	No
Poland (allergology — subspecialty)	2	No	2	5			
Portugal	4				Yes	Yes	Yes
Spain	4	No	4			To be determined	
Sweden	4½	No	4	½	[b]		
Switzerland							
Turkey[c]	1	No	1	—	Yes	Yes	Yes
United Kingdom	6-7	No	5	1-2	Yes	Yes	Yes
USSR	40[d]	No			Yes		Yes
Yugoslavia[e]							

Microbiology

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	3	No	3	—	—	Yes	Yes
Austria[a]	6	Yes	4	2	No	No	No
Belgium[b]	5		1½	1½-3½	No	No	No
Bulgaria	3	No	3	—	Yes	—	Yes
Czechoslovakia	6	No	5½	½	Yes	Yes	Yes
Denmark	6	No	5	1	No	No	No
Finland (clinical microbiology)[c]	6	No	4	2	No	Yes	No
France							
German Democratic Republic	4-5	No	3½	½	Yes	No	No
Germany, Federal Republic of	5	Yes	4	1	Yes	No	No
Greece	3	No			Yes	No	Yes

Hungary	2		2	—	Yes	No	Yes
Iceland	4	No	3	1	No	No	No
Ireland	6	No	—	—	Yes	Yes	Yes
Italy	4	No	3		Yes	No	Yes
Luxembourg	4	No	4				
Netherlands	4	No	4	0	No	No	No
Norway	5	No	4	1	No	No	No
Poland							
Portugal							
Spain	3	No	3			To be determined	
Sweden (clinical bacteriology)	4½	No	4	½	[d]		
Switzerland							
Turkey	3	No	3	—	Yes	Yes	Yes
United Kingdom	6-7	No	5	1-2	Yes	Yes	Yes
USSR	184[e]	No					
Yugoslavia[f]	3	No	29[g]	5-7[g]	Yes	No	Yes

Morbid anatomy (histopathology)

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	3	No	3	—	—	Yes	Yes
Austria (histology)	6	Yes	4	2	No	No	No
Belgium[a]	5						
Bulgaria	3	No	3	—	Yes	—	Yes
Czechoslovakia	6		5½	½	Yes	Yes	Yes
Denmark	5	No	5	—	No	No	No
Finland							
France	3	No	3	—	No	Yes	Yes
German Democratic Republic	4-5	No	4	—	Yes	No	No
Germany, Federal Republic of							
Greece	—	—	—	—	—	—	—

Hungary	—	—	—	—	—	—	—
Iceland	4	No			No	No	No
Ireland	6	No	—	—	Yes	Yes	Yes
Italy	3	No	3		Yes	No	Yes
Luxembourg	4	No	4				
Netherlands	4	No	4	0	No	No	No
Norway							
Poland	I°2/II°2½	No	4½		Yes		Yes
Portugal	4		4				
Spain			See Pathology				
Sweden	—	—	—	—	—	—	—
Switzerland	5		4	1			
Turkey			See Pathology				
United Kingdom	6-7	No	5	1-2	Yes	Yes	Yes
USSR	180[b]	No			Yes		Yes
Yugoslavia	4	No	35[c]	13[c]	Yes	No	Yes

Psychiatry

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	3	No	3	—	—	Yes	Yes
Austria	6	Yes	5	1	No	No	No
Belgium							
Bulgaria	3	No	3	—	Yes	—	Yes
Czechoslovakia	6	No	5½	½	Yes	Yes	Yes
Denmark	5	No	4	1	No	No	No
Finland	6	No	4	2	No	Yes	No
France	3	No	3	—	No	Yes	Yes
German Democratic Republic	—	—	—	—	—	—	—
Germany, Federal Republic of	4	Yes	3	1	Yes	No	No
Greece	—	—	—	—	—	—	—

Hungary	4		44½[a]	3½[a]	Yes	No	Yes
Iceland	4½	No	3	1½	No	No	No
Ireland	7	No	—	—	Yes	Yes	Yes
Italy	4	No	3		Yes	No	Yes
Luxembourg	4	No	4				
Netherlands	4	No	3	1	No	No	No
Norway	5	No	4	1	No	No	No
Poland	I°2½/II°3	No	5½		Yes	Yes	Yes
Portugal	4				Yes	Yes	Yes
Spain	4	No	4			To be determined	
Sweden (general)	4½	No	3½	1	[b]		
Switzerland	5		4	1			
Turkey	3	No	2¼	¾	Yes	Yes	Yes
United Kingdom	6-7	No	5	1-2	Yes	Yes	Yes
USSR	94[c]	No			Yes	Yes	Yes
Yugoslavia			See Neurology				

Public health (hygiene)

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	See Epidemiology/community medicine						
Austria	6	Yes	4	2	No	No	No
Belgium							
Bulgaria	3	No	3	—	Yes	—	Yes
Czechoslovakia	6	No	5½	½	Yes	Yes	Yes
Denmark	—	—	—	—	—	—	—
Finland	6	No	3	3	No	Yes	No
France	1	No	1	—	No	Yes	Yes
German Democratic Republic	4-5	No	3	1	Yes	No	No
Germany, Federal Republic of	5	Yes	2½	2½	Yes	No	No
Greece	—	—	—	—	—	—	—

Hungary	4		3½	½	Yes	No	Yes
Iceland	4½	No	1[a]	4	No	Yes	No
Ireland	See Epidemiology/community medicine						
Italy	4	No	3		Yes	No	Yes
Luxembourg							
Netherlands							
Norway							
Poland							
social medicine	I°2	No	4		Yes		Yes
public health	II°2	No			Yes		Yes
Portugal	4				Yes	Yes	Yes
Spain	See Epidemiology/community medicine						
Sweden	—	—	—	—	—	—	—
Switzerland							
Turkey	3	No	2	1	Yes	Yes	Yes
United Kingdom (community medicine)	6-7	No	5	1-2	Yes	Yes	No
USSR	160[b]	No			Yes	Yes	Yes
Yugoslavia	3	No	20[c]	12-16[c]	Yes	Yes	Yes

Radiodiagnosis

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	3	No	3	—	—	Yes	Yes
Austria	6	Yes	4½	1½	No	No	No
Belgium	4[a]	No	4[a]		No	No	No
Bulgaria	—	—	—	—	—	—	—
Czechoslovakia	6	No	5½	½	Yes	Yes	Yes
Denmark	4	No	3	1	No	No	No
Finland	6	No	4	2	No	Yes	No
France	Combined with Radiotherapy						
German Democratic Republic	4-5	No	4	—	Yes	No	No
Germany, Federal Republic of[b]	5	Yes	4½	½	Yes	No	No
Greece	3	[c]	1¼	1¾[d]	Yes	No	Yes

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Hungary	4		3¼	¾	Yes	No	Yes
Iceland	4½	No	3½	1	No	No	No
Ireland	6	No	—	—	Yes	Yes	Yes
Italy	4	No	3		Yes	No	Yes
Luxembourg	4	No	4				
Netherlands	4	No	4	0	No	No	No
Norway	5	No	4	1[e]	No	No	No
Poland	I°2/II°3	No	5		Yes		Yes
Portugal	4				Yes	Yes	Yes
Spain	4	No	4			To be determined	
Sweden (diagnostic radiology)	4½	No	4	½	[f]		
Switzerland	5		3	2			
Turkey (includes radiotherapy)	4	No	2	2	Yes	Yes	Yes
United Kingdom	6-7	No	5	1-2	Yes	Yes	Yes
USSR			Combined with Radiotherapy				
Yugoslavia	3-4	No	31[g]	5-7[g]	Yes	No	Yes

Radiotherapy

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	—	—	—	—	—	—	—
Austria							
Belgium	4[a]	No	4[a]		No	No	No
Bulgaria	—	—	—	—	—	—	—
Czechoslovakia	6	No	5½	½	Yes	Yes	Yes
Denmark	4	No	3	1	No	No	No
Finland	6	No	4	2	No	Yes	No
France	3	No	3		No	Yes	Yes
German Democratic Republic	—	—	—	—	—	—	—
Germany, Federal Republic of			See Radiodiagnosis				
Greece	5	[b]	2[c]		No	No	No

Hungary	4		2	2	Yes	No	Yes
Iceland	4½	No	3	1½	No	No	No
Ireland	6	No	—	—	Yes	Yes	Yes
Italy	4	No	3		Yes	No	Yes
Luxembourg	4	No	4				
Netherlands	4	No	3¾	¼	No	No	No
Norway (includes oncology)	5	No	3	2	No	No	No
Poland	I°2/II°3	No	5		Yes		Yes
Portugal	4	No	4		Yes	Yes	Yes
Spain	4	No	3	1		To be determined	
Sweden				See Oncology			
Switzerland	5						
Turkey (includes radiodiagnosis)	4	No	2	2	Yes	Yes	Yes
United Kingdom	6-7	No	5	1-2	Yes	Yes	Yes
USSR (combined with radiodiagnosis)	210[d]	No			Yes	Yes	Yes
Yugoslavia (includes oncology)	3-4	No	30[e]	6-8[e]	Yes	No	Yes

Surgery (general)

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	4	No	4	—	—	Yes	Yes
Austria	6	Yes	4	2	No	No	No
Belgium[a]	6	No	6		No	No	No
Bulgaria	4	No	4	—	Yes	—	Yes
Czechoslovakia	8	No	6½	1½	Yes	Yes	Yes
Denmark	5½	No	5	½	No	No	No
Finland	6	No	4½	1½	No	Yes	No
France	5	Yes[b]	4	—	No	Yes	Yes
German Democratic Republic	4–5	No	4	—	Yes	No	No
Germany, Federal Republic of	6	Yes	5½	½	Yes	No	No
Greece	4	No	4		Yes	No	Yes

Hungary	4		3	½	Yes	No	Yes
Iceland	4½	No	3½	1	No	No	No
Ireland	7	No	—	—	Yes	Yes	Yes
Italy	5	Yes	3		No	No	Yes
Luxembourg	6	No	6				
Netherlands	6	No	6	0	No	No	No
Norway	6	No	5	1	No	No	No
Poland	I°2/II°4	No	6		Yes	Yes	Yes
Portugal	5	No	5		Yes	Yes	Yes
Spain	5	No	3	2		To be determined	
Sweden	4½	No	4	½	[c]		
Switzerland	6		6				
Turkey	4	No	3	1	Yes	Yes	Yes
United Kingdom	6-7	No	4	2-3	Yes	Yes	Yes
USSR (includes thoracic/ cardiac/cardiothoracic)	1506[d]	No	900[d]		Yes	Yes	Yes
Yugoslavia	4	No	25[e]	15-23[e]	Yes	No	Yes

Neurosurgery

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	4	No	4	—	—	Yes	Yes
Austria	6	Yes	4½	1½	No	No	No
Belgium[a]	6	No	6		No	No	No
Bulgaria	4	No	3¾	¼	Yes	—	Yes
Czechoslovakia	8	No	3	5	Yes	Yes	Yes
Denmark	5½	No	4	1½	No	No	No
Finland (main specialty)	6	No	5	1	No	Yes	No
France	5	Yes	4	—	No	Yes	Yes
German Democratic Republic	4-5	No	4	—	Yes	No	No
Germany, Federal Republic of	6	Yes	5	1	Yes	No	No
Greece	5	No	3	2[b]	Yes	No	Yes

Hungary	3		2	1	Yes	No	Yes
Iceland	4½	No	3	1½	No	No	No
Ireland	8	No	—	—	Yes	Yes	Yes
Italy	5	No	3		Yes	No	Yes
Luxembourg	6	No	6				
Netherlands	6	No	4	2	No	No	No
Norway	6	No	4	2[c]	No	No	No
Poland (after I° surgery)	5½	No	II°3½	2	Yes		Yes
Portugal	5	No	5		Yes	Yes	Yes
Spain	5	No	4	1		To be determined	
Sweden	5½	No	4	1½	[d]		
Switzerland	6		4	2			
Turkey	5	No	3	2	Yes	Yes	Yes
United Kingdom	8	No	5	3	Yes	Yes	Yes
USSR	24°	No			Yes	Yes	Yes
Yugoslavia	3-5	No	24[f]	18-24[f]	Yes	No	Yes

Orthopaedics

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	4	No	4	—	—	Yes	Yes
Austria	6	Yes	3½	2½	No	No	No
Belgium[a]	6	No	6		No	No	No
Bulgaria	4	No	3¾	¾	Yes	—	Yes
Czechoslovakia	8	No	6½	1½	Yes	Yes	Yes
Denmark	5½	No	5	½	No	No	No
Finland (includes traumatology)[b]	2	No	2	—	No	Yes	No
France	5	Yes	4	—	No	Yes	Yes
German Democratic Republic	4-5	No	3½	½	Yes	No	No
Germany, Federal Republic of	5	Yes	4	1	Yes	No	No
Greece	4	—	3	1	Yes	No	Yes

Hungary	4		3½	½	Yes	No	Yes
Iceland	4½	No	3	1½	No	No	No
Ireland	7	No	—	—	Yes	Yes	Yes
Italy	4	No	3		Yes	No	Yes
Luxembourg	5	No	5				
Netherlands	6	No	4	2	No	No	No
Norway	8	No	3[c]	5[d]	No	No	No
Poland (includes accident surgery)	I°2/II°3	No	5		Yes		Yes
Portugal	5	No	5		Yes	Yes	Yes
Spain (includes traumatology/accident)	5	No	3	2		To be determined	
Sweden	4½	No	2	2½	[e]		
Switzerland	6		3	3			
Turkey (includes traumatology/accident)	4	No	3	1	Yes	Yes	Yes
United Kingdom	6-7	No	4	2-3	Yes	Yes	Yes
USSR		See Traumatology/accident surgery					
Yugoslavia (includes traumatology)	3-4	No	21[f]	15½-27[f]	Yes	No	Yes

Otorninolaryngology

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	3	No	3	—	—	Yes	Yes
Austria	6	Yes	4	2	No	No	No
Belgium	3[a]	No	3[a]		No	No	No
Bulgaria	3	No	3	—	Yes	—	Yes
Czechoslovakia	7	No	6	1	Yes	Yes	Yes
Denmark	4	No	3	1	No	No	No
Finland (main specialty)	6	No	4	2	No	Yes	No
France	3	No	3	—	No	Yes	Yes
German Democratic Republic	4-5	No	3¾	¼	Yes	No	No
Germany, Federal Republic of	4	Yes	4	—	Yes	No	No
Greece	3	No	2	1	Yes	No	Yes

Hungary	4		4	—	Yes	No	Yes
Iceland	4	No	3	1	No	No	No
Ireland	6	No	—	—	Yes	Yes	Yes
Italy	3	No	3		Yes	No	Yes
Luxembourg	4	No	4				
Netherlands	4	No	4	0	No	No	No
Norway	4½	No	3	1½	No	No	No
Poland	I°1½/II°3	No	4½		Yes		Yes
Portugal	4	No	4		Yes	Yes	Yes
Spain	4	No	3	1		To be determined	
Sweden	4½	No	3½	1	[b]		
Switzerland	5		4	1			
Turkey	3	No	3	—	Yes	Yes	Yes
United Kingdom	6	No	3	2-3	Yes	Yes	Yes
USSR	76[c]	No			Yes	Yes	Yes
Yugoslavia	4	No	35[d]	10-13[d]	Yes	No	Yes

Thoracic/cardiac/cardiothoracic surgery

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	4	No	4	—	—	Yes	Yes
Austria							
Belgium[a]	5	No	5		No	No	No
Bulgaria	—	—	—	—	—	—	—
Czechoslovakia	8	No	3	5	Yes	Yes	Yes
Denmark	5½	No	5	½	No	No	No
Finland[b]	2	No	2	—	No	Yes	No
France	5	Yes	4	—	No	Yes	Yes
German Democratic Republic	—	—	—	—	—	—	—
Germany, Federal Republic of	6	Yes	5½	½	Yes	No	No
Greece	7	No	2	1½[c]	No	No	No

Hungary	2		1½	½	Yes	No	Yes
Iceland	4½	No	2	2½	No	No	No
Ireland	7	No	—	—	Yes	Yes	Yes
Italy	5	No	3		Yes	No	Yes
Luxembourg	6	No	6				
Netherlands (cardiothoracic surgery only)	6	No	4	2	No	No	No
Norway	8	No	3[d]	5	No	No	No
Poland[e]	5	No	3	2	Yes		Yes
Portugal	5	No	5		Yes	Yes	Yes
Spain	5	No	4	1		To be determined	
Sweden	5½	No	3	2½			
Switzerland							
Turkey	5	No	3	2	Yes	Yes	Yes
United Kingdom	7	No	4	3	Yes	Yes	Yes
USSR			See Surgery (general)				
Yugoslavia	4	No	26[g]	22[g]	Yes	No	Yes

Traumatology/accident surgery

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	See Orthopaedics						
Austria (accident surgery only)	6	Yes	3	3	No	No	No
Belgium							
Bulgaria	—	—	—	—	—	—	—
Czechoslovakia	8	No	3	5	Yes	Yes	Yes
Denmark	—	—	—	—	No	No	No
Finland	See Orthopaedics						
France	5	Yes	4	—	No	Yes	Yes
German Democratic Republic	3	No	2¾	¼	No	No	No
Germany, Federal Republic of[a]	6	Yes	5½	½	Yes	No	No
Greece	—	—	—	—	—	—	—

Hungary	2		22[b]	2[b]	Yes	No	Yes
Iceland	4½	No	3	1½	No	No	No
Ireland	7	No	—	—	Yes	Yes	Yes
Italy	5	No			Yes	No	Yes
Luxembourg							
Netherlands							
Norway							
Poland							
Portugal	5	No	5		Yes	Yes	Yes
Spain			See Orthopaedics				
Sweden	—	—	—	—	—	—	—
Switzerland							
Turkey			See Orthopaedics				
United Kingdom	7	No	4	3	Yes	Yes	Yes
USSR (includes orthopaedics)	282[c]	No	144[c]		Yes	Yes	Yes
Yugoslavia			See Orthopaedics				

Urology

Country	No. of years required for training in this specialty	Does this include internship?	From total given in first column		Type of examination		
			Minimum period of training required in the specialty itself (years)	Training required in other fields (years)	Oral	Written	Practical/ clinical
Algeria	4	No	4	—	—	Yes	Yes
Austria	6	Yes	4	2	No	No	No
Belgium[a]	6	No	6		No	No	No
Bulgaria	4	No	2¾	1¼	Yes	—	Yes
Czechoslovakia	7	No	5½	1½	Yes	Yes	Yes
Denmark	5½	No	5	½	No	No	No
Finland (subspecialty of surgery)	2	No	2	—	No	Yes	No
France	5	Yes	4	—	No	Yes	Yes
German Democratic Republic	4-5	No	3	1	Yes	No	No
Germany, Federal Republic of	5	Yes	4	1	Yes	No	No
Greece	4	—	3	1	Yes	No	Yes

Hungary	4		3¾	¼	Yes	No	Yes
Iceland	4½	No	2	2½	No	No	No
Ireland	6	No	—	—	Yes	Yes	Yes
Italy	3-5[b]	No	3		Yes	No	Yes
Luxembourg	6	No	6				
Netherlands	6	No	3	3	No	No	No
Norway	8	No	3[c]	5	No	No	No
Poland[d]	5	No	3	2	Yes		Yes
Portugal	5	No	5		Yes	Yes	Yes
Spain	5	No	3	2		To be determined	
Sweden	4½	No	2	2½	[e]		
Switzerland	6		3	3			
Turkey	3	No	2½	½	Yes	Yes	Yes
United Kingdom	6	No	3	3	Yes	Yes	Yes
USSR	34[f]	No	144[f]		Yes	Yes	Yes
Yugoslavia	4	No	26[g]	20-22[g]	Yes	No	Yes

FOOTNOTES TO TABLE 3

Anaesthetics with reanimation and/or intensive care

[a] Internship can be included in specialist training.

[b] Six courses with different types of examination.

[c] Hours.

[d] Months.

Clinical pharmacology

[a] Subspecialty.

[b] The 1982 reform of medical specialties, in accordance with European Community policy, is intended to achieve a uniform duration of courses for specialization throughout Italy.

[c] I° specialization is in anaesthetics, internal medicine, paediatrics or neurology.

[d] Hours.

[e] Months.

Clinical physiology

[a] Six courses with different types of examination.

[b] Hours.

[c] Not regarded as specialty in the field of medicine although postgraduate training is available.

Dermatology/dermatovenereology

[a] Six courses with different types of examination.

[b] Hours.

[c] Months.

Epidemiology/community medicine

[a] Academic year.

[b] I° may be in different specialties.

[c] Six courses with different types of examination.

[d] Hours.

[e] Months.

Forensic/legal medicine

[a] Details supplied.

[b] Months.

[c] Six courses with different types of examination.

[d] Hours.

General practice/family practice/general medicine

[a] There are special requirements for the training of general practitioners (details given).

[b] Two months' internal medicine, one month's otorhinolaryngology, three months' paediatrics.

[c] Months.

[d] Work in hospital departments plus 300 hours of courses.

[e] Six courses with different types of examination.

[f] One year of surgery, one year of general medicine and three years of choice in other discipline.

[g] Hours.

Internal medicine

[a] The term "internat", in France, describes a form of training entirely distinct from the "internship" as understood in other countries. See original report: **Parkhouse, J.** *Graduate medical education in the European Region*: report on a Capacity Study. Copenhagen, WHO Regional Office for Europe, 1974 (unpublished document EURO 6301(1)).

[b] Months.

[c] Six courses with different types of examination.

[d] Hours.

Cardiology

[a] Subspecialty of internal medicine.

[b] The 1982 reform of medical specialties, in accordance with European Community policy, is intended to achieve a uniform duration of courses for specialization throughout Italy.

[c] There are five subspecialties of general medicine, in which two years' training in the subspecialty may be included in the period of training in the main specialty.

[d] Subspecialization, after specialization in internal medicine or paediatrics.

[e] Six courses with different types of examination.

[f] In addition to general medicine.

[g] Following specialization in internal medicine.

[h] Months.

Chest medicine/tuberculosis

[a] Months.

[b] The 1982 reform of medical specialties, in accordance with European Community policy, is intended to achieve a uniform duration of courses for specialization throughout Italy.

[c] There are five subspecialties of general medicine, in which two years' training in the subspecialty may be included in the period of training in the main specialty.

[d] Six courses with different types of examination.

[e] In addition to general medicine.

[f] Chest medicine includes tuberculosis.

[g] Hours.

Neurology/neuropsychiatry

[a] Months.

[b] Six courses with different types of examination.

[c] Hours.

Obstetrics and gynaecology

[a] The term "internat", in France, describes a form of training entirely distinct from the "internship" as understood in other countries. See original report: **Parkhouse, J.** *Graduate medical education in the European Region*: report on a Capacity Study. Copenhagen, WHO Regional Office for Europe, 1974 (unpublished document EURO 6301(1)).

[b] Months.

[c] Six courses with different types of examination.

[d] Hours.

Oncology

[a] There are three different specialties: oncological surgery (two years' training), radiotherapy (three years' training), or cological pathology (one year's training).

[b] There is a separate specialty of gynaecological oncology requiring five years' training (minimum of two years in specialty itself).

[c] Six courses with different types of examination.

[d] Hours.

Ophthalmology

[a] Under review.

[b] Details supplied.

[c] Six courses with different types of examination.

[d] Hours.

[e] Months.

Occupational health/industrial medicine

[a] Training in industrial medicine does not confer medical specialty recognition by the Ministry of Public Health and Family Affairs. A one- to two-year course leads to a degree.

[b] Months.

[c] Six courses with different types of examination.

[d] In addition to general medicine.

[e] Hours.

Paediatrics

[a] Internship can be included in specialist training.

[b] Months.

[c] Six courses with different types of examination.

[d] Hours.

Parasitic diseases (tropical medicine)

[a] Training in tropical medicine does not confer medical specialty recognition by the Ministry of Public Health and Family Affairs. There is a five-month degree in the Prince Leopold Institute, Antwerp.

[b] Subspecialty of internal medicine.

[c] Two years of infectious diseases and one year of microbiology. These three years may be included in the training period of internal medicine.

[d] Subspecialty, after specialization in internal medicine or infectious diseases.

[e] Six courses with different types of examination.

[f] Hours.

Pathology

[a] Pathophysiology.

[b] Internship can be included in specialist training.

[c] Subspecialty, after specialization in internal medicine or industrial medicine.

[d] Six courses with different types of examination.

[e] Months.

Clinical chemistry/biochemistry

[a] Medicochemical laboratory diagnosis.

[b] Training consists of a basic two years (six months each in histopathology, clinical chemistry, microbiology and haematology) and three years' higher training, including a minimum of one year in the subject.

[c] Internship can be included in specialist training.

[d] Six courses with different types of examination.

[e] Hours.

[f] Months.

Genetics (medical)

[a] Hours.

[b] Not regarded as a specialty in the field of medicine, although postgraduate training is available.

Haematology

[a] Training includes basic two years (six months each in histopathology, clinical chemistry, microbiology and haematology) and three years' higher training which must include a minimum of one year in the subject.

[b] Subspecialty of internal medicine and paediatrics.

[c] Serological medicine.

[d] Internal medicine.

[e] Subspecialty, after specialization in internal medicine or paediatrics.

[f] In addition to general medicine.

[g] Following specialization in internal medicine.

[h] Months.

Immunology

[a] Subspecialty of clinical microbiology.

[b] Six courses with different types of examination.

[c] Following specialization in microbiology.

[d] Hours.

[e] Not regarded as a specialty in the field of medicine although postgraduate training is available.

Microbiology

[a] Microbiological-serological laboratory diagnosis.

[b] Training includes basic two years (six months each in histopathology, clinical chemistry, microbiology and haematology) and three years' higher training which must include a minimum of one year in the subject.

[c] Main specialty.

[d] Six courses with different types of examination.

[e] Hours.

[f] Includes parasitic diseases.

[g] Months.

Morbid anatomy (histopathology)

[a] Training consists of two years (six months each in histopathology, clinical chemistry, microbiology and haematology) and three years' higher training. Criteria for morbid anatomy are still under consideration.

[b] Hours.

[c] Months.

Psychiatry

[a] Months.

[b] Six courses with different types of examination.

[c] Hours.

Public health (hygiene)

[a] Academic year.

[b] Hours.

[c] Months.

Radiodiagnosis

[a] Under review.

[b] Radiology.

[c] Internship can be included in specialist training.

[d] Fifteen months' radiotherapy; six months' radiology.

[e] Including six months' radiotherapy.

[f] Six courses with different types of examination.

[g] Months.

Radiotherapy

[a] Under review.

[b] Internship can be included in specialist training.

[c] Trainees must be graduates in radiology.

[d] Hours.

[e] Months.

Surgery (general)

[a] Training in thoracic surgery (and also in vascular surgery and abdominal surgery) occupies five years. The surgical specialties have been regrouped: surgery, neurosurgery, plastic surgery, urology and orthopaedics. Specialization in other surgical disciplines is by certificate, after spending the last two years of the six years of surgical training in the special field.

[b] The term "internat" in France, describes a form of training entirely distinct from the "internship" as understood in other countries. See original report: **Parkhouse, J.** *Graduate medical education in the European Region*: report on a Capacity Study. Copenhagen, WHO Regional Office for Europe, 1974 (unpublished document EURO 6301(1)).

[c] Six courses with different types of examination.

[d] Hours.

[e] Months.

Neurosurgery

[a] Training in thoracic surgery (and also in vascular surgery and abdominal surgery) occupies five years. The surgical specialties have been regrouped: surgery, neurosurgery, plastic surgery, urology and orthopaedics. Specialization in other surgical disciplines is by certificate, after spending the last two years of the six years of surgical training in the special field.

[b] Details supplied.

[c] There are five subspecialties of surgery, for which the requirement is training in surgery plus three years in the subspecialty; one of the three years in the subspecialty may be included in the main specialty training.

[d] Six courses with different types of examination.

[e] Hours.

[f] Months.

Orthopaedics

[a] Training in thoracic surgery (and also in vascular surgery and abdominal surgery) occupies five years. The surgical specialties have been regrouped: surgery, neurosurgery, plastic surgery, urology and orthopaedics. Specialization in other surgical disciplines is by certificate, after spending the last two years of the six years of surgical training in the special field.

[b] Subspecialty of surgery.

[c] There are five subspecialties of surgery, for which the requirement is training in surgery plus three years in the subspecialty; one of the three years in the subspecialty may be included in the main specialty training.

[d] Including six months' neurology/neurosurgery.

[e] Six courses with different types of examination.

[f] Months.

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Otorhinolaryngology

[a] Under review.

[b] Six courses with different types of examination.

[c] Hours.

[d] Months.

Thoracic/cardiac/cardiothoracic surgery

[a] Training in thoracic surgery (and also in vascular surgery and abdominal surgery) occupies five years. The surgical specialties have been regrouped: surgery, neurosurgery, plastic surgery, urology and orthopaedics. Specialization in other surgical disciplines is by certificate, after spending the last two years of the six years of surgical training in the special field.

[b] Subspecialty of surgery.

[c] Details supplied.

[d] There are five subspecialties of surgery, for which the requirement is training in surgery plus three years in the subspecialty; one of the three years in the subspecialty may be included in the main specialty training.

[e] Subspecialization after II° specialization in surgery.

[f] Six courses with different types of examination.

[g] Months.

Traumatology/accident surgery

[a] Accident surgery only.

[b] Months.

[c] Hours.

Urology

[a] Training in thoracic surgery (and also in vascular surgery and abdominal surgery) occupies five years. The surgical specialties have been regrouped: surgery, neurosurgery, plastic surgery, urology and orthopaedics. Specialization in other surgical disciplines is by certificate, after spending the last two years of the six years of surgical training in the special field.

[b] The 1982 reform of medical specialties, in accordance with European Community policy, is intended to achieve a uniform duration of courses for specialization throughout Italy.

[c] There are five subspecialties of surgery, for which the requirement is training in surgery plus three years in the subspecialty; one of the three years in the subspecialty may be included in the main specialty training.

[d] Subspecialization, after 11° specialization in surgery.

[e] Six courses with different types of examination.

[f] Hours.

[g] Months.

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